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**NAVAL
POSTGRADUATE
SCHOOL**

MONTEREY, CALIFORNIA

THESIS

**AMERICAN HIGHER EDUCATION IN THE ARABIAN
GULF—A FORCE FOR LIBERALIZATION**

by

Christian J. Davis

June 2010

Thesis Advisor:
Second Reader:

Robert Looney
Abbas Kadhim

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The proliferation of American branch campuses in Qatar and the United Arab Emirates (UAE) that provide identical educational plans and degrees as their parent institutions offer a promising method of liberalizing these societies by advancing research and critical thinking. Networks will be made between students and academics allowing for the transmission of ideas and the promotion of multiculturalism and tolerance. The host countries will establish superior higher educational systems, which will enable these societies to better integrate into the global knowledge economy and diversify their economies away from the rentier model.

Education City in Qatar and Dubai International Academic City in the UAE are models to emulate to quickly establish world-class education hubs that will improve human development and lay the foundation for new industries in the evolving knowledge economy. Indigenous higher education systems have proven inept at training their students for the realities of the evolving global economy that has hindered the evolution of competitive industries in the MENA region. American branch campuses offer the best way to advance American policy in the region and further American national interests through peaceful means.

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**AMERICAN HIGHER EDUCATION IN THE ARABIAN GULF—A FORCE FOR
LIBERALIZATION**

Christian J. Davis
Lieutenant, United States Navy
B.A., University of South Florida at Tampa, 1990

Submitted in partial fulfillment of the
requirements for the degree of

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June 2010**

Author: Christian J. Davis

Approved by: Robert Looney, PhD
Thesis Advisor

Abbas Kadhim, PhD
Second Reader

Harold A. Trinkunas, PhD
Chairman, Department of National Security Affairs

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TABLE OF CONTENTS

I.	INTRODUCTION.....	1
II.	HIGHER EDUCATION IN THE MIDDLE EAST	3
A.	HISTORICAL PERSPECTIVE	3
B.	THE ARABIAN GULF	6
C.	EMERGENCE OF AMERICAN INSTITUTIONS	8
D.	ESTABLISHMENT OF ARAB UNIVERSITIES	10
E.	PRIVATIZATION TREND	12
III.	THE GLOBAL KNOWLEDGE ECONOMY.....	15
A.	GLOBALIZATION AND EDUCATION.....	15
B.	NATION BUILDING	16
C.	R&D	18
D.	GATS.....	20
E.	QUALITY ASSURANCE	22
F.	ENGLISH – THE NEW LINGUA FRANCA	22
IV.	INTERNATIONALIZATION OF HIGHER EDUCATION.....	27
A.	ORIGIN OF UNIVERSITIES	27
B.	ORIGIN OF FOREIGN BRANCH CAMPUS.....	28
C.	EVOLUTION OF THE AMERICAN UNIVERSITY.....	29
D.	EDUCATION HUBS	32
E.	THE BOLOGNA DECLARATION.....	34
F.	HIGHER EDUCATION EXPORTERS	35
G.	INTERNATIONAL STUDENTS	39
H.	STUDY ABROAD PROGRAMS	43
V.	MENA REGION EDUCATION DEMOGRAPHICS	47
A.	STUDENT POPULATION GROWTH	47
B.	EDUCATION DEFICIENCIES	51
C.	BRAIN DRAIN.....	52
D.	STATE EMPLOYMENT	54
E.	UNEMPLOYMENT	56
F.	FOREIGN LABOR.....	57
G.	FEMALE STUDENTS	60
H.	9-11 RAMIFICATIONS	63
VI.	QATAR	67
A.	HISTORY	67
B.	NATURAL RESOURCES	70
C.	POPULATION.....	71
D.	EMPLOYMENT	73
E.	PUBLIC EDUCATION	75
F.	NATIONAL STUDENT ASSESSMENTS	77
G.	UNIVERSITY STUDENT ENROLLMENT.....	78

H.	HER HIGHNESS SHEIKHA MOZAH BINT NASSER AL MISSNED	79
I.	THE QATAR FOUNDATION	81
J.	EDUCATION CITY	82
K.	THE ACADEMIC BRIDGE PROGRAM.....	85
VII.	THE UNITED ARAB EMIRATES.....	89
A.	HISTORY	89
B.	POPULATION.....	92
C.	NATURAL RESOURCES	93
D.	EMPLOYMENT	94
E.	UNIVERSITY GRADUATES	95
F.	FEMALE STUDENTS	95
G.	PUBLIC EDUCATION.....	97
H.	THE ROLE OF EXPATRIATES IN HIGHER EDUCATION	99
I.	THE EMIRATE OF DUBAI.....	99
J.	THE EMIRATE OF ABU DHABI.....	104
K.	THE EMIRATE OF SHARJAH	106
L.	THE FAILURE OF GEORGE MASON UNIVERSITY	108
VIII.	CONCLUSION	109
	LIST OF REFERENCES	113
	INITIAL DISTRIBUTION LIST	123

I. INTRODUCTION

The question this paper addresses is *Why have American foreign branch campuses proliferated so rapidly in the Arabian Gulf, and what role can American higher education have in liberalizing and democratizing the Gulf emirates of Qatar and the United Arab Emirates?* The American system of higher education is becoming an important export as more universities take their programs overseas. Overseas foreign branch campuses can reduce friction between countries and cultures by increasing mutual understanding through the exchange of ideas in American institutions of higher education working in partnership with host countries.¹ Overseas programs can help American universities raise their profile, build international relationships, attract top research talent who, in turn, may attract grants and produce patents, and gain access to a new pool of tuition-paying students, just as the number of college-age Americans is about to decline.² Traditionally, top universities built their international presence through study-abroad sites, research partnerships, faculty exchanges and joint degree programs offered with foreign universities. Overseas branches, with the same requirements and degrees as the home campuses, are a newer phenomenon and have rapidly expanded overseas in the last decade.

American universities are competing to set up outposts in countries with limited higher education opportunities. American universities are starting, or expanding, hundreds of programs and partnerships in booming markets like China, India and Singapore. And many are now considering full-fledged foreign branch campuses, particularly in the oil-rich Middle East. Students in the Arabian Gulf state of Qatar can attend an American university without the expense, culture shock or post-9/11 visa problems of traveling to America. At Education City in Doha, Qatar's capital, they can study medicine at Weill Medical College of Cornell University, international affairs at

¹ Tamar Levin, "U.S. Universities Rush to Set Up Outposts Abroad", New York Times, February 10, 2008, <http://www.nytimes.com/2008/02/10/education/10global.html> (accessed November 8, 2009).

² Ibid.

Georgetown, computer science and business at Carnegie Mellon, fine arts at Virginia Commonwealth University, engineering at Texas A&M, and journalism at Northwestern.³ In the United Arab Emirates, New York University has established a campus in Abu Dhabi with classes to commence in the fall of 2010 and construction is underway for the new Abu Dhabi University City. Johns Hopkins University, Massachusetts Institute of Technology (MIT), and the French Sorbonne are also creating programs there. In Dubai, another emirate, Michigan State University and Rochester Institute of Technology opened campuses in the fall of 2008 in Dubai's Academic city.⁴ The idea of a high-quality foreign education at home, or close to home, is proving to be an attractive option for students in the region.⁵

Despite poll findings that highlight considerable opposition among Arab public opinion toward U.S. foreign policy, the popularity of American-style higher education is at an all-time high. Governments worldwide, and especially in the Arabian Gulf, have invited western universities to establish autonomous branch campuses in order to upgrade their higher education systems. American curriculums are taught in English, which will help Gulf countries become more productive in the new global knowledge economy. The presence of these universities will enable the Gulf States to diversify their economies through human capital development and help prepare their economies for the future when their energy resources have been exhausted. Internationalization has brought these branch campuses to the Arabian Gulf, and a possible outcome may be the increased democratization of these societies as American beliefs and principles are promulgated via these universities.

³ The Qatar Foundation, <http://www.qf.edu.qa> (accessed December 11, 2009).

⁴ Dubai Academic City, <http://www.diac.ae> (accessed December 11, 2009).

⁵ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," American Council on Education (September 2009), 2 <http://www.acenet.edu> (accessed March 15, 2010)

II. HIGHER EDUCATION IN THE MIDDLE EAST

A. HISTORICAL PERSPECTIVE

The Arabs have an established educational tradition that goes back to the dawn of Islam in the seventh century A.D., when emphasis was placed on learning and teaching the tenets of the new faith. It was imperative for the Muslims to understand the Qur'an and the Traditions of the Prophet, on which the nascent society's theories of law and government were based.⁶ Religion was the main focus of education in all Islamic countries, from the advent of Islam to the early decades of the twentieth century. The mosques, the *kuttabs* and the *madrasas* served the spiritual and educational needs of their populations for centuries prior to the establishment of western-style schools.⁷ With the spread of Islam from the Arabian Peninsula to Syria, Iraq, Egypt, North Africa, Spain and other parts of Europe and Asia, a network of privately supported religious institutions spread throughout the Muslim empire to disseminate the new religion.⁸

Higher learning is deeply rooted in the history and societies of the Arab Middle East. After the seventh century and the Islamization of the Arab world, local religious schools known as *madrasa* became the main institutions of higher learning in the Middle East. They established and disseminated educational standards that are still applied in present-day universities, such as the separation of master's from doctorate programs, tenure, and protections for academic freedom.⁹ *Madrasas* like *al-Azhar* (established in 975 in Cairo and still producing scholars of Islamic culture and ethics) and the

⁶ M. Ali Kettani, "Engineering Education in the Arab World," *Middle East Journal*, Vol. 28 No. 4 (Autumn, 1974): 441, <http://www.jstor.org/stable/4325291> (accessed January 10, 2009).

⁷ Nagal El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide* (New York: Garland Publishing, 1992), 28.

⁸ El-Sanabary , *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 12.

⁹ Vincent Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects" Brandeis University Crown Center for Middle East Studies Brief No.36 (May 2009): 2, <http://www.brandeis.edu/crown> (accessed January 12, 2010).

Qarawiyyun in Fez originated in intellectual movements such as humanism and scholasticism, which nurtured the subsequent flourishing of western scholarship after the twelfth century.¹⁰

During the same period, other institutions of the Arab world such as hospitals, libraries, observatories, and private homes known as “academies” undertook the development of the nonreligious sciences, inspired by the ancient Greeks. The history of Arab higher education starts with the Islamic renaissance in the eighth and ninth century. This renaissance started with the Abbasid caliphs.¹¹ In the period 750–850, Abbasid caliphs established and generously endowed translation centers, libraries, observatories, and hospitals.¹² Baghdad emerged as a cosmopolitan, intellectual center similar in importance to Athens and Alexandria, attracting scholars and students from places as far away as central Asia.¹³ At the same time, al-Andalus (now the southern region of Spain named Andalucia) thrived as an intellectual center most prominently in the cities of Cordoba, Granada, Toledo, Seville, Valencia and Cadiz. Such centers usually developed around great libraries (Cordoba’s contained 600,000 volumes by the late tenth century).¹⁴ Here a group of polymaths emerged starting with al-Kindi (the “Philosopher of Arabs,” 801–873), al-Razi (Rhazes, 864–930), al-Farabi (Avennasar, 870–950), Ibn-Sina (Avicenna, 980–1037), and Ibn-Rushd (Averroes, 1126–1198). They preserved Greco-Roman epistemic heritage, and improved on it by their commentaries and original contributions.¹⁵ Their interests covered a wide gamut of subjects to include philosophy, natural sciences, medicine, music and poetry. These intellectuals acquired, preserved and

¹⁰ Vincent Romani, “The Politics of Higher Education in the Middle East: Problems and Prospects” Brandeis University Crown Center for Middle East Studies Brief No.36 (May 2009): 2, <http://www.brandeis.edu/crown> (accessed January 12, 2010).

¹¹ Jacques Aswad et al., *Arab Human Development Report 2003: Building a Knowledge Society* (New York: United Nations Development Program, 2003), 43.

¹² Kemal Guruz, *Higher Education and International Student Mobility in the Global Economy* (Albany, N.Y.: SUNY Press Albany, 2008), 119.

¹³ Ibid.

¹⁴ W.H. Cowley, *International and Historical Roots of American Higher Education* (New York: Garland Publishing, 1991), 34.

¹⁵ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 119.

improved upon the philosophy of Plato and Aristotle, Euclid's mathematics, Ptolemy's astronomy, Archimedes's mechanics and Hippocrates's medical sciences.¹⁶

During the eighth and through the twelfth centuries, considered the "Golden Age of Islam", the Muslims made considerable contributions to human knowledge. They translated major works from Greek, Latin, Syriac, Sanskrit, and Persian into Arabic, and made scientific discoveries of their own, thus laying the foundation of western science. For 500 years, Arabic was the language of science¹⁷ and by the dawn of the Italian Renaissance, the knowledge cultivated within these disciplines and others had been translated and transmitted to Europe through Italy and Spain ending the Dark Ages in Europe.¹⁸ The main centers of Islamic learning were Baghdad, Cairo and Cordoba where Muslims created the first functioning world education systems by linking Chinese, Indian and Middle Eastern educational cores.¹⁹ Institutions like Baghdad's *Dar al-Hikma* (House of Wisdom), which was a vast academic center that thrived from the ninth to the thirteenth centuries and the Great Library of Alexandria that endured until the sixteenth century produced innovations including key astronomical discoveries and the foundation of modern algebra.²⁰

The Muslim empire reached its zenith in tenth-century Iraq. At that time, Baghdad was the center of world science and culture. A more advanced level of schooling began with the establishment of the *Madrasah Nizamiyyah*, in Baghdad in 1067. Its establishment marked the beginning of a sectarian system of education that had a strong political basis where public opinion was molded to support the Sunni orthodox Islam against the Shia branch.²¹ The learning center at Mustansiriyyah, founded in 1234, was

¹⁶ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 119.

¹⁷ Daniel Del Castillo, "The Arab World's Scientific Desert," *The Chronicle of Higher Education* (March 5, 2005): 1.

¹⁸ Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 2.

¹⁹ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 13.

²⁰ Zvika Krieger, "Ballad of the Old Cafés: War, Chaos and Repression Are Driving the Decline of the Once Great Arab Centers of Learning," *Newsweek* Vol. 152 Iss. 8, August 25, 2008, 1.

²¹ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 12.

contemporary with the European universities of Salerno, Bologna, Paris and Oxford.²² The fall of Baghdad under the Mongol invasion in 1258 was the beginning of the fragmentation and the decline of the Muslim empire under Mameluke rule that ran from about 1250 until Ottoman rule began in 1517 and lasted until the end of World War I.²³

B. THE ARABIAN GULF

The Arab World is composed of 21 independent states that spread across 14 million square kilometers and span three continents. At the heart of the Arab World is the Arabian Gulf. The shallow Gulf extends approximately 1,000 kilometers from the mouth of the Tigres-Euphrates River, the *Shatt-al- Arab*, to the Strait of Hormuz. Covering an expanse of 140,000sq.km, the Gulf has historically served as an inland sea for commerce, transportation, fishing and pearl mining.²⁴

Because of its strategic position, the Gulf region has been a vital trade route and communication link between Europe, Africa and Asia, and was also a target of attacks, invasions, and occupation. European interest in the area began in the 1500s with Portuguese explorers, followed by the British, who—for several centuries—vied with the Ottomans for control over the area. British infiltration in the Gulf began during the eighteenth century, and culminated in colonial rule after World War I. The British colonial regime in India began penetrating the Gulf in the 1820s by signing treaties with the local sheiks and princes, giving the British Empire control over the waterways to India and ultimately tightening its grip on the whole region.²⁵

The British authorities imposed severe restrictions on the economic activities of the region's inhabitants and forced the Arab people of the Gulf out of their formerly

²² Cowley, *International and Historical Roots of American Higher Education*, 35.

²³ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 5.

²⁴ Larry Neal Garrett and Ali Farghaly, "On the Need for an Integrated Policy Infrastructure for the Delivery of Technical and Vocational Education in the Arab Gulf Region", *Comparative Education* Vol. 23 No. 3 (1987): 317 (accessed: January 10, 2009 via JSTOR).

²⁵ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 5.

strong trade with the Indian and African costs, through intense competition with the relatively modern steam-powered transportation of the British East India Company. Treaties were signed with local sheiks and tribes in what is now known as Qatar (1869), the Trucial States—United Arab Emirates—(1887), Oman (1891), Kuwait (1899), and Bahrain (1892). By 1924, Britain's control of the area was so complete that one British official declared: “Our position in the Persian Gulf is at the present time absolutely untouched and unassailable.”²⁶ Britain had succeeded in transforming the Gulf into a “British Lake” sealed off from foreign influence.²⁷ With the British departure in 1971, the United States became the dominant superpower in the region. Since World War II, the U.S. has maintained strong political, economic, and cultural ties with the various Gulf States. Its Gulf policy has been based primarily on three concerns: oil, the Arab-Israeli conflict, and containment of Soviet expansionism.²⁸

For centuries, the most common form of education in the six Gulf monarchies was the *kuttab*, where a group of boys were taught to recite the Qur'an and sometimes learned basic writing and arithmetical skills.²⁹ The *mutawa'a*, ostensibly a religious man who was usually the *imam* (cleric) of the local mosque, would provide instruction. This *mutawa'a* system relied heavily on the rote learning of large sections of the Koran and the Prophet Mohammad's various utterances or *Hadith*.³⁰ This kind of education usually took place either in mosques or houses. There were no organized classrooms. Additionally, the sons of the ruling elites received religious education from the *ulama* (Muslim scholars).³¹ These traditional institutions were the precursors of the modern

²⁶ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 6.

²⁷ Christopher Davidson, *Higher Education in the Gulf States: Shaping Economies, Politics and Culture* (London: London Middle East Institute, 2008), 28.

²⁸ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 8.

²⁹ Gawdat Bahgat, “Education in the Gulf Monarchies: Retrospect and Prospect,” *International Review of Education* Vol. 45 No. 2 (1999): 129 (accessed August 10, 2009 via JSTOR).

³⁰ Davidson, *Higher Education in the Gulf States: Shaping Economies, Politics and Culture*, 25.

³¹ Bahgat, “Education in the Gulf Monarchies: Retrospect and Prospect,” 129.

elementary schools.³² This formula of education survived until the twentieth century. It was only in 1839 that reforms in the Turkish elementary education started gradually to be introduced. New elementary and secondary schools (*rushdiahs*) were slowly founded. In 1860, Turkey superimposed public education on the old schools, but the traditional *maktab*s and *madrassehs* continued everywhere.³³ The first secular schools were opened by the Ottoman Turks in Iraq and Saudi Arabia between 1875 and 1920, and by 1915 seventy-eight Turkish schools had been established in the Hijaz (western region of Saudi Arabia). These schools catered to the needs of male children of Turkish settlers and wealthy Arabs. Instruction, conducted in Turkish, included a diversified curriculum designed to produce civil servants.³⁴

C. EMERGENCE OF AMERICAN INSTITUTIONS

During the nineteenth century, contact with the West through trade, educational and cultural missions, and even military invasion by British and French colonialists, aroused Arab nationalist sentiment and interest in western education and science. They began to emulate western schools and curricula. In every state, old and new schools existed side by side in a dual system with two distinct orientations: a religious system for the masses and a secular one for the elite.³⁵ Private missionaries were the first Americans to target education in the Middle East. They imported a rotary press in 1834 that initiated the printing of books in Arabic.³⁶ Missionaries founded the Syrian Protestant College in Beirut in 1866, which became the American University of Beirut (AUB) after World War I.³⁷ By 1975, AUB had awarded some 20,000 degrees. Its alumni include three Arab

³² El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 12.

³³ Joseph S. Roucek, "Education in the Middle East," *The Phi Delta Kappan* Vol. 37, No. 9 (June, 1956): 441 (accessed January 10, 2009 via JSTOR).

³⁴ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 14.

³⁵ Ibid., 13.

³⁶ N. Marbury Efimenco, "American Impact Upon Middle East Leadership," *Political Science Quarterly* Vol. 69 No. 2 (June, 1954): 202 (accessed: January 10, 2009 via JSTOR).

³⁷ Efimenco, "American Impact Upon Middle East Leadership," 203.

presidents, ten prime ministers, more than thirty cabinet ministers and thirty-five ambassadors.³⁸ In 1881, the College of St. Joseph was founded in Beirut with French backing as the Catholic response to the Protestants; it later became a Pontifical University.³⁹ In the Arabian Gulf, Christian missionaries opened several schools in Iraq, Kuwait and Bahrain toward the end of the nineteenth century and the beginning of the twentieth century. The first school in the gulf was a school for girls founded in Bahrain in 1892 by the Arabian Mission, an affiliate of Protestant American missionaries. The Mission achieved only limited success in promoting modern education due to its close association with Christianity.⁴⁰ The United Mission of Mesopotamia opened schools for boys and girls in Iraq in the 1920s. However, Qatar and Saudi Arabia prohibited all missionary activities including the founding of schools.⁴¹

The American University in Cairo was founded in 1919 by American Methodist Episcopal missionaries, but it quickly moved away from its missionary endeavors in favor of becoming a more secular, educational nonprofit institution.⁴² At that time, just prior to the First World War, there was not a single college or university in all North Africa except *Al Azhar*, a medieval institution offering religious training. Classes commenced on a site in the center of Cairo in 1920. Americans at this time were in good standing in the Middle East. Arab hopes for independence were high, and the report to Woodrow Wilson in 1919 by the King-Crane Commission, acting for the Inter-Allied Commission on Mandates in Turkey, indicated that the Arabs trusted the United States as a mentor in their national development toward independence.⁴³ The Egyptian press and

³⁸ Dith Miller, "American University in Beirut: Walking a Precarious Line," *Science* Vol. 188 (June 20, 1975): 1192.

³⁹ Jacob M. Landau, "Arab and Turkish Universities: Some Characteristics" *Middle Eastern Studies* Vol. 33 No. 1 (January, 1997): 6. (accessed August 10, 2009 via JSTOR)

⁴⁰ Bahgat, "Education in the Gulf Monarchies: Retrospect and Prospect," 129.

⁴¹ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 14.

⁴² Shafeeq Ghabra and Margreet Arnold, "Studying the American Way: An Assessment of American-Style Higher Education in Arab Countries," *Washington Institute for Near East Policy*, Focus #71 (June 2007): 6.

⁴³ E. Freeman , "The American University in Cairo: An Experiment in Cross-cultural Development," *The Journal of Higher Education* Vol. 34 No. 3 (March 1963): 153 (accessed August 10, 2009 via JSTOR)

King Fuad were enthusiastic supporters of the institution despite its Christian leanings. The program, which was on the secondary-school and junior-college level in the early years, was gradually expanded to cover four years of college. In 1928 the first degree was granted. Today, AUC has an enrollment of over five thousand students with eighty-five percent Egyptian nationals. The remaining fifteen percent are from seventy countries throughout the world, including five hundred students from the U.S. who study Arabic or Area Studies. Language of instruction is in English.⁴⁴

D. ESTABLISHMENT OF ARAB UNIVERSITIES

The first true Arab universities started with the reemergence of the Arab states in the early decades of the twentieth century. The first, Cairo University, started in 1908. The University of Damascus, originally an Ottoman College, was converted into an Arab University in 1923.⁴⁵ Close to the end of the Second World War and following it, public interest in universities grew in the Arab countries as they were perceived to serve a vital role in nationalist movements.⁴⁶ New universities were founded in quick succession in Egypt, Syria (the Syrian University, 1946), Lebanon (the Lebanese University, 1950), the Sudan (the University College of Khartoum in 1951, which became the University of Khartoum in 1956), Libya (the University of Libya, 1955), Iraq (various separate institutions were joined in 1956 to form Baghdad University), Morocco (the University of Rabat, 1957), Saudi Arabia (King Saud University was established in Riyadh in 1957), Tunisia (the National University of Tunisia founded in Tunis in 1958), Jordan (University of Jordan, 1962) and Kuwait (1966).⁴⁷ The University of Qatar was founded in 1977. The University of the United Arab Emirates was also founded in 1977. The University of Bahrain and the Sultan Qaboos University in Oman both opened in 1986.⁴⁸ Arab

⁴⁴ Ghabra, “Studying the American Way: An Assessment of American-Style Higher Education in Arab Countries,” 6.

⁴⁵ Kettani, “Engineering Education in the Arab World,” 445.

⁴⁶ Ibid.

⁴⁷ Landau, “Arab and Turkish Universities: Some Characteristics,” 7.

⁴⁸ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 21.

governments saw the universities as training grounds for the numerous experts, teachers and officials needed to replace those of the colonial powers. In promoting such policies, some governments encouraged mass education at university level (as well as at the primary and secondary ones) at the expense of quality.⁴⁹

Traditionally, Arab national governments have played a dominant role in education. It typically controls curricula even at private schools. Most teachers are government employees, and most education is publicly financed. Most Arab countries have two or more separate governmental agencies that manage education: one for K-12, another for post-secondary, and often others for technical, military, or for girls' education. Most education is free or at minimal cost. Free education, publicly provided, has been a central tenet of the social contract in every MENA country since its independence.⁵⁰

Iraq had the earliest government supported schools and colleges in the Gulf. It opened primary schools toward the end of the nineteenth century, secondary schools at the turn of the twentieth century, and the first college—a college of law—in 1908. When Iraq became independent in 1932, it had 300 primary and fifteen secondary schools and several colleges located in the main cities. By 1988, Iraq's higher education enrollment had reached 209,818 spread out in numerous colleges and twenty-five two-year technical institutes.⁵¹ Bahrain had the oldest public school system in the Arabian Peninsula, opening a public primary school for males in 1919 and one for girls in 1928. Qatar did so in 1952. Saudi Arabia opened public male schools in 1930 after the unification of the kingdom by King Abdelaziz in the early 1930s. Girl schools were not opened there until 1960. Oman was the last in providing public education to its citizens in 1970.⁵²

⁴⁹ Landau, "Arab and Turkish Universities: Some Characteristics," 9.

⁵⁰ William A. Rugh, "Arab Education: Tradition, Growth and Reform," *Middle East Journal* Vol. 56 No. 3 (Summer, 2002): 399 (accessed January 10, 2009 via JSTOR).

⁵¹ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 20.

⁵² Ibid., 16.

E. PRIVATIZATION TREND

Today, some thirty percent of global higher education enrollment is in the private sector.⁵³ Privatization means many things in higher education. Private institutions may operate entirely with private assets or partially with public funds; they may be for-profit or nonprofit; they may be accountable to the host government or operate completely outside of local regulation; they may have owners or investors or operate as foundations.⁵⁴ East Asia has the largest concentration of countries with proportionally larger private sectors. Countries with over seventy percent of enrollments in private higher education include Indonesia, Japan, the Philippines, and the Republic of Korea. China and much of Southeast Asia (e.g., Cambodia and Vietnam) remain below fifteen percent but are experiencing rapid expansion. South Asia has seen striking private growth, with India above thirty percent and Pakistan not too far behind. Latin America has a long history of dual-sector development and private education has reached forty-five percent. Western Europe has very low private enrollments at below ten percent but in Central and Eastern Europe, enrollments have passed twenty percent and are growing, especially in Poland. After nearly fifty percent private enrollment in the mid-twentieth century, the United States is currently at twenty-five percent private enrollment.⁵⁵

In the Middle East and North Africa, the growth of private tertiary education has been more recent but is accelerating. Until recently, MENA had some of the lowest rates of private schooling in the world. Except for some outliers (Lebanon, Jordan, and Kuwait), few countries had a large private formal schooling sector across all levels of instruction.⁵⁶ In only a handful of countries are shares of enrollments in private institutions significant. Among these countries is the Islamic Republic of Iran, where private tertiary education appeared for the first time in 1983 and where private institutions now enroll more than thirty percent of the total student population. In Jordan,

⁵³ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 44.

⁵⁴ Philip G. Altbach, ed., “Trends in Global Higher Education: Tracking an Academic Revolution,” (report Prepared for the UNESCO 2009 World Conference on Higher Education 2009), 79.

⁵⁵ Ibid., 84.

⁵⁶ Ahmed Galal et al., *The Road Not Traveled: Education Reform in the Middle East and North Africa* (Washington, D.C.: The World Bank, 2008), 288.

private tertiary education is a fairly recent phenomenon (since 1991), but growth in enrollment has been rapid; in 1999 private institutions accounted for thirty-five percent of total tertiary enrollment.⁵⁷ Most other nations in the region still depend on the state to provide and finance the bulk of tertiary education. But even countries that had an exclusively or predominantly public sector, such as the Arab Republic of Egypt, Morocco, Tunisia, and the Republic of Yemen, have opened up in the past decade. These countries are proceeding cautiously in setting up an institutional framework that will allow for the expanded development of the private tertiary education sector. The Tunisian and Moroccan governments conducted internal discussions for several years before submitting legislation on private higher education to their respective parliaments. In Egypt at the beginning of the 1990s, the government revoked the automatic guarantee of a public sector job for university graduates, and it has allowed the operation of private tertiary education institutions. Recently, the heads of state of Oman and the Syrian Arab Republic announced that private providers, including foreign ones, may enter the tertiary education market.⁵⁸

Since 2000, all the Gulf Cooperation Council (GCC) nations have come to see the authorization and expansion of private higher education institutions as the solution to their educational deficiencies.⁵⁹ Saudi Arabia, Kuwait, Bahrain and Oman have all seen their first private universities open within the last two years, with strong public support and praise by their governments. Some are purely local institutions funded by investors, while others are either joint ventures with foreign universities or satellite campuses of the latter. The governments of Qatar and the UAE have set aside tracts of land in order to create high-prestige “university cities” to attract western universities. Qatar and the UAE have both announced their ambitious desire to become the regional hub for world-class higher education.

⁵⁷ Jamil Salmi, ed., “Constructing Knowledge Societies: New Challenges for Tertiary Education,” *The International Bank for Reconstruction and Development* (2002), <http://www.worldbank.org> (accessed January 15, 2010).

⁵⁸ Ibid., 1.

⁵⁹ Ugo Fasano and Zubair Iqbal, “GCC Countries: From Oil Dependence to Diversification,” *International Monetary Fund* (2003), <http://www.imf.org> (accessed January 15, 2010), 1.

In 1940, there were only ten universities in the MENA countries, by 2000 there were 175 Arab universities and forty-seven (27 percent) were non-governmental.⁶⁰ These non-governmental institutions existed only in nine Arab states and over half were in Lebanon (9 of its 10), Palestine (7 of its 8) and Jordan (10 of its 17).⁶¹ By 2007, Arab Universities had reached 260.⁶² Of the 108 Arab universities established since 1980, thirty-three were private.⁶³

The last to participate in this academic expansion have been the GCC countries. Between 1957 and 1985, twenty-three modern universities were established in the various Gulf States including seven universities in Saudi Arabia and six in Iraq. All these universities were patterned after either British or American models; and many of their professional and engineering faculties use western textbooks and English as their medium of instruction.⁶⁴ Eight universities were operating in Saudi Arabia in 2003, but at least 100 additional universities and colleges have been created there since, and the country's annual budget for higher education has reached \$15 billion, for 23 million inhabitants.⁶⁵ The UAE and Qatar have established forty foreign branches of western universities over the same period. Over the last five years, the GCC countries have expended at least \$50 billion on higher education, and those levels of spending continue. They reflect two main trends: first, the rapid growth of higher education in the Arab world over the last decade; and second, the emergence of the Arab Gulf as an important academic actor in the region.⁶⁶ The emergence of new private Arab institutions follows a trend that has existed in the developing world since the 1960s, particularly in the Far East, where more than seventy-five percent of students in Japan, Korea and the Philippines are now in private schools.⁶⁷

⁶⁰ Rugh, "Arab Education: Tradition, Growth and Reform," 401.

⁶¹ Ibid., 401.

⁶² Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 1.

⁶³ Rugh, "Arab Education: Tradition, Growth and Reform," 401.

⁶⁴ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 22.

⁶⁵ Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 1.

⁶⁶ Ibid.

⁶⁷ UNESCO, "Higher Education in Developing Countries: Peril and Promise" *UNESCO* (2000): 29–30 <http://www.unesco.org> (accessed February 22, 2010).

III. THE GLOBAL KNOWLEDGE ECONOMY

A. GLOBALIZATION AND EDUCATION

Globalization is the flow of technology, knowledge, people, values, ideas, capital, goods, and services across national borders.⁶⁸ Internationalization, on the other hand, has more to do with the "specific policies and programs undertaken by governments, academic systems and institutions, and even individual departments to deal with globalization."⁶⁹ Globalization, in reference to education, is defined as "as the economic, political, and societal forces pushing twenty-first century higher education toward greater international involvement."⁷⁰ According to Merrill Lynch, the international education sector is presently a \$2.2 trillion business worldwide.⁷¹ E-learning is the fastest-growing sub-sector of the global education market, and the market for online higher education is estimated to exceed \$69 billion by 2015.⁷² In the United States, it is estimated that international students and their families contributed nearly \$15.5 billion to the U.S. economy during the academic year 2007-2008.⁷³ Globally, one estimate indicates that the world's international students represent a \$45 billion "industry".⁷⁴ The percentage of the age cohort enrolled in tertiary education has grown from nineteen percent in 2000 to twenty-six percent in 2007.⁷⁵ The World Bank calculates that global spending on higher

⁶⁸ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 138.

⁶⁹ J.Forest and P.G.Altbach, "Globalization and the University: Realities in an Unequal World," *International Handbook of Higher Education* Vol. 1(2006): 123.

⁷⁰ Ibid.

⁷¹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 114.

⁷² Hezel International, <http://www.hezel.com/global/> (accessed December 2, 2009)

⁷³ NAFSA, "The Economic Benefits of International Education to the United States for the 2007-2008 Academic Year: A Statistical Analysis," (2008), http://www.nafsa.org/_File/_eis08/Guam.pdf (accessed March 29, 2009)

⁷⁴ C. Barrow, "Globalization, Trade Liberalization, and the Trans-nationalization of Higher Education" (paper presented at Boston College, Chestnut Hill, Mass, November 18, 2008).

⁷⁵ Altbach, "Trends in Global Higher Education: Tracking an Academic Revolution" 38.

education amounts to \$300 billion a year, or one percent of global economic output. There are more than eighty million students worldwide, and 3.5 million people are employed to teach them or look after them.⁷⁶

The results of globalization include the integration of research, the use of English as the *Lingua Franca* for scientific communication, the growing international labor market for scholars and scientists, the growth of communications firms and of multinational and technology publishing, and the use of information.⁷⁷ A country's capacity to take advantage of the knowledge economy therefore depends on how quickly it can adjust its capacity to generate and share knowledge.⁷⁸ Globalization, declining communication and transportation costs, and the opening of political borders combine to facilitate increased movements of skilled people. This dynamic is de facto leading to a global market for advanced human capital in which individuals with tertiary education are the most likely to participate.⁷⁹

B. NATION BUILDING

Capitalism in the global knowledge economy is now driving the virtuous cycle of innovation, reward, reinvestment, and more innovation.⁸⁰ A global transition from energy-intensive industries to knowledge-intensive industries has occurred, and industrial trade has been transformed into a far more complex information economy.⁸¹ The ability of a society to produce, select, adapt, commercialize, and use knowledge is critical for sustained economic growth and improved living standards. Knowledge has become the

⁷⁶ The Economist, "Survey: The Brains Business" *The Economist* Vol. 376, Iss. 8443 (September 10, 2005): 4. (accessed November 20, 2009 via Proquest).

⁷⁷ Philip Altbach, "The Internationalization of Higher Education: Motivations and Realities," *The NEA Almanac of Higher Education* (2006): 1.

⁷⁸ Salmi, "Constructing Knowledge Societies: New Challenges for Tertiary Education," 14.

⁷⁹ William Carrington and Enrica Detragiache, "How Extensive is the Brain Drain?" *Finance & Development* Vol.36 (June 1999): 47.

⁸⁰ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 12–13.

⁸¹ R. Gilpin, *The Political Economy of International Relations* (New Jersey: Princeton University Press,1987), 21.

most important factor in economic development.⁸² Knowledge-driven economies demand higher-level skills in the workforce. In Organization for Economic Co-operation and Development (OECD) countries, the proportion of employees with tertiary-level qualifications is increasing, as are rates of return on tertiary education. In these industrial countries, the proportion of adults with tertiary education qualifications almost doubled between 1975 and 2000, rising from twenty-two to forty-one percent.⁸³

Higher education has always played a key role in the development of national cultural identity and nation building. The importance of an educated citizenry to nation building and a well-trained workforce to economic development has become even more crucial in the global knowledge economy. Tertiary education “facilitates nation building by promoting greater social cohesion, trust in social institutions, democratic participation and open debate, and appreciation of diversity in gender, ethnicity, religion, and social class”.⁸⁴ Tertiary education also plays a key role in supporting basic and secondary education, thereby buttressing the economic externalities produced by these lower levels. Improved tertiary education is necessary for sustainable progress in basic education.⁸⁵

The countries that do not have developed higher education systems have resorted to importing higher education services from countries with advanced higher education systems, sending students abroad, or by allowing providers to operate in their countries. Ability to work in international environments has become a key requisite for employment in the global labor market, and the importance of the development of intercultural skills in students and staff in institutions of higher education worldwide has become paramount. This has been referred to as the “capacity-building approach” to policy formulation at the national and the institutional levels.⁸⁶ Conversely, the development and transfer of technology is not as straightforward as it was in the industrial economy; technology and know-how is now increasingly being transferred in a variety of forms,

⁸² Salmi, “Constructing Knowledge Societies: New Challenges for Tertiary Education,” 7.

⁸³ Ibid., 26.

⁸⁴ Ibid., xxi.

⁸⁵ Ibid., xxxii.

⁸⁶ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 141.

most importantly through human learning. Technology and know-how transfer is now a major rationale for internationalizing higher education systems, especially for increasing student mobility in both directions, for developing as well as developed countries.⁸⁷ Increasingly, institutions of higher education are building partnerships with universities in other countries, delivering education using online and other technologies, and setting up branch campuses abroad that are changing the structure and relationships that traditionally existed in higher education. If these trends continue, growing numbers of students seeking higher education in the years ahead will be able to obtain quality education in their homelands or neighboring countries rather than having to travel to other regions to do so.⁸⁸

C. R&D

An important trend has been the spectacular growth of scientific and technological research that forms the underpinning of the knowledge economy. Governments worldwide are the largest supporters of academic science, which increasingly takes place within higher education, but private funding of university-based research has also increased. The "triple helix" of university/government/industry linkages has resulted in important organizational changes within the university.⁸⁹ In some countries and universities, special offices and positions have materialized and prospered to encourage new "entrepreneurial" thinking and to generate new income streams for the university.⁹⁰ Countries that have located a higher share of their research and development (R&D) activity in the educational sector have been able to achieve significantly higher patenting productivity.⁹¹

⁸⁷ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 142.

⁸⁸ Mary M. Kritz, "Globalization and Internationalization of Tertiary Education," (report submitted to the United Nations Population Division, Cornell University, Ithaca, New York, August 21, 2006).

⁸⁹ Altbach, "Trends in Global Higher Education: Tracking an Academic Revolution," 141.

⁹⁰ Ibid.

⁹¹ Scott Stern, Michael E. Porter, and Jeffrey L. Furman, "The Determinants of National Innovative Capacity," *National Bureau of Economic Research Working Paper 7876* (2000): 25.

The Arab States have a low ranking in research development and technological innovation. The overall spending in R&D is about 0.15 percent of the gross domestic product (GDP), compared with an average of 1.4 percent in the world, and 2.5 percent in Europe.⁹² Covering the period 1990-2000, there were about 500 scientists and engineers involved in R&D per million people in the Arab States, compared with more than 4,000 per million people in North America, 2,500 in Europe and about 700 in South and East Asia.⁹³ The world average was around 1,000 per million. By the end of the twentieth century, the number of publications – original writings and translations – per million people was around 0.05 in the Arab World, compared with an average of 0.15 worldwide and 0.6 in the industrialized countries.⁹⁴ The development returns of Arab scientific research are very weak and do not correspond to the magnitude of annual Arab expenditure on them, which tops \$2 billion and which, in the period 2002-2006, resulted in no more than approximately 38.2 patents per year and 5,000 published scientific papers.⁹⁵

The MENA region's historical models of development have discouraged outward orientation. Heavy import protection, excess consumption of goods and services not traded internationally, and overvalued and uncompetitive exchange rates have all provided strong disincentives to the growth of trade.⁹⁶ MENA's exports are dominated by oil, and only a few countries in the region have experienced the dynamic growth in non-oil exports that characterizes world trends. The entire MENA region, with a population close to 320 million, has fewer non-oil exports than Finland or Hungary, countries with populations of five and ten million, respectively.⁹⁷

⁹² Albert Sasson, “Research and Development in the Arab States: the Impact of Globalization, Facts and Perspectives,” (paper presented at the UNESCO Regional Seminar “The Impact of Globalization on Higher Education and Research in the Arab States,” Rabat, Morocco, May 24–25, 2007).

⁹³ Sasson, “Research and Development in the Arab States: Impact of Globalization, Facts and Perspectives,” 2.

⁹⁴ Ibid.

⁹⁵ The World Bank, “Knowledge Assessment Methodology 2008,” <http://www.worldbank.org/wbi/kamon> (accessed 25 February 2010).

⁹⁶ Ahmed Galal et al., *The Road Not Traveled: Education Reform in the Middle East and North Africa* (Washington, D.C.: The World Bank, 2008), 227.

⁹⁷ Ahmed Galal et al., *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 227.

D. GATS

The origins of the General Agreement on trade in Services, known as GATS, dates back to efforts by major western powers to liberalize trade immediately after World War II, which resulted in the General Agreement on Trade and tariffs (GATT), an ongoing and expanding negotiation process that focused on international trade in industrial goods. In 1995, the World Trade Organization (WTO) replaced GATT and a decision was made to include trade in services under the auspices of the WTO. Within five years, the multilateral negotiating process on international trade in services started, which now covers 149 members of the WTO. The GATS is a voluntary agreement, which aims to expand the opportunities for global trade in services by removing barriers. The U.S. government, through the Department of Commerce, and the for-profit private higher education providers have favored GATS, while organizations like the American Council on Education and the academic community generally have opposed it. The latter groups are concerned about how the increased emphasis on competition and markets that GATS would bring would affect the traditional values of American colleges and universities.⁹⁸ The GATS in general is pushed by the United States, the European Union and Japan.⁹⁹

Once a nation becomes a member, it is subject to the general obligations of GATS and makes specific commitments regarding the opening of its markets to service providers from other members in twelve service sectors comprising 163 subsectors, and education is one of these sectors. Currently, 149 nations are participating in GATS, but as of 2006 only forty-five countries (the EU counts as one country) agreed to include at least one of the five education subsectors (primary education, secondary education, higher education, adult education, and other education that includes testing and certification) and only thirty-six agreed to liberalize their education subsectors.¹⁰⁰ Because of disagreement

⁹⁸ Philip Altbach, "Higher Education Crosses Borders," *Change* Vol. 36, Iss. 2 (Mar/Apr 2004): 18.

⁹⁹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 150.

¹⁰⁰ Ibid.

on agricultural issues during negotiations in Geneva to keep the Doha Round alive, renewed efforts in 2007 to restart the GATS were unsuccessful.¹⁰¹

Transnational education accounts for only two and three percent of the annual volume of total global trade in services. The GCC region has become an arena where competitive corporate actors vie aggressively for profit and a greater share of revenues in an ever-expanding market of educational commodities.¹⁰² The inclusion of education in a comprehensive international agreement on trade led to strong opposition worldwide for mainly two reasons. First, despite the historical international roots of higher education, and the expansion of transnational education in the last two decades, many regard higher education, and especially education at lower levels, as a matter of national policy. Second, although private institutions have always been components of national education systems at all levels, and despite the recent expansion of private education, including for-profit education, education is widely regarded as a semi-public service even by many of the advocates of free markets and liberal trade.¹⁰³ Those who consider higher education to be an entirely private service, which is tradable and must be paid in full by those who benefit from that service, are a distinct minority.¹⁰⁴ Wider acceptance of GATS is likely to accelerate the trend transforming higher education into a commodity that can be invested in by private and foreign providers operating on a global scale.¹⁰⁵ GATS, if put into action, would remove some restrictions on cross-border higher education initiatives, making it easier for U.S. academic institutions and corporations to offer programs and set up branches abroad.¹⁰⁶

¹⁰¹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 154.

¹⁰² Paul Lefrere, “Competing Higher Education Futures in a Globalizing World,” *European Journal of Education* no.42 (2007): 210.

¹⁰³ Ibid.

¹⁰⁴ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 151.

¹⁰⁵ Rajani Naidoo, “Higher Education as a Global Commodity: The Perils and Promises for Developing Countries,” *OBHE* (February, 2007): 4 <http://www.obhe.ac.uk> (accessed April 3, 2010).

¹⁰⁶ Altbach, “Higher Education Crosses Borders,” 18.

E. QUALITY ASSURANCE

Quality assurance is a major concern in transnational provision of higher education. The United Nations Educational, Scientific and Cultural Organization (UNESCO) recognized the International Council for Open and Distance Education (ICDE est. in 1983) as the global nongovernmental organization responsible for quality assurance in transnational distance education.¹⁰⁷ The International Network for Quality Assurance Agencies in Higher Education (INQAAHE), founded in 1999 in Australia and recognized by UNESCO, currently has sixty-three full and forty-one associate members. Promotion of good practices, better informed international recognition of qualifications and alerting members to dubious accrediting practices are among the aims of the organization.¹⁰⁸ However, there is presently no binding international mechanism or institutional structure with the power to enforce standards for quality assurance in transnational higher education. There exists a vacuum at the international level in the area of quality assurance and recognition in transnational higher education that is recently being filled by individual institutions. National and international accreditation agencies are now operating in fifty countries. U.S. national, regional and professional/program accrediting bodies such as ABET are selling services in over sixty-five countries. Institutions all over the world are lining up to build an international reputation by a “U.S. brand.”¹⁰⁹

F. ENGLISH – THE NEW LINGUA FRANCA

The world-wide roles of Latin, French, German and Russian have declined. French remains important in Francophone Africa, and German continues to be quite widely known in university circles in Japan and Korea. Arabic is a common medium of academic discussion in many nations, and Spanish is an important regional language in

¹⁰⁷ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 155.

¹⁰⁸ Ibid., 156.

¹⁰⁹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 158.

Central and South America with a growing importance in the United States.¹¹⁰ Numerically, English is only one of the languages spoken by one billion people; the other is Putonghua (Mandarin Chinese). Two pairings of related languages are spoken by more than half a billion people: Hindi/Urdu, and Spanish/Portuguese. Another three languages are spoken by more than 200 million people: Russian, Bengali and Arabic.¹¹¹

The English language dominates science, scholarship, and instruction. Colonialism provided stimulus for the spread of English as early as the eighteenth century—to North America, South Asia, and the Caribbean, and later to Africa, other parts of Asia, Australasia, and the South Pacific.¹¹² The emerging academic systems of the former British Empire—especially India, Pakistan, South Africa, and Nigeria—have traditionally used English as the main teaching and publishing language. English did not dominate scholarly communication until the 1950s as most countries used their national languages for academic university teaching and for science and scholarship. English now serves unchallenged as the main international academic language. The main scientific and scholarly journals are published in English because their editors and most of their contributors are professors at universities in the English-speaking countries. Similarly, the large majority of the world's academic websites and scientific networks function in English. English has an official government-recognized status in more than seventy countries.¹¹³

The branch campus movement exports both language and curriculum, introducing new ideas into host countries and perhaps displacing national models. The worldwide branch campus movement for the most part uses English as the medium of instruction. The United States, Australia, and the United Kingdom have been most active in establishing branch campuses, and it is not surprising that English is the medium of

¹¹⁰ Simon Marginson, “Globalization and Higher Education” (paper No. 8 presented at the Organization for Economic Cooperation and Development Conference, Brussels, Belgium, July 6, 2007).

¹¹¹ Ibid., 22.

¹¹² Philip Altbach, “The Imperial Tongue: English as the Dominating Academic Language,” *International Educator* Vol. 17, Iss. 5 (Sep/Oct 2008): 57.

¹¹³ Altbach, “The Imperial Tongue: English as the Dominating Academic Language,” 57.

instruction.¹¹⁴ Dutch and German branch overseas campuses often offer their programs in English. The growth of English as the global language of science and scholarship is inevitable for the foreseeable future.¹¹⁵

English is also spreading as a medium of instruction in non English-speaking nations, particularly in programs designed to attract foreign students. It is widely used in India and the Philippines, and in Singapore and Hong Kong China. In Malaysia, it has been reintroduced in the school sector and is dominant in the growing private tertiary college sector. It is also growing in use as a medium of instruction in the education export industry in China. Within Europe, English is increasingly used as the language of instruction in selected programs, especially at the master's level and those targeting students from Asia. Nations where English is widely used include the Netherlands, Finland, Iceland, Sweden and Denmark.¹¹⁶

There is a debate among Arab academics and officials as to which language of instruction is best, and some have tried to bridge the gap by creating "hybrid" institutions, teaching in English and Arabic, which utilize English or French in the classroom plus western textbooks on some secular subjects while using Arabic for Islamic studies, Arab history, culture, and the Arabic language.¹¹⁷ The rapid growth in the MENA region of western educational institutions utilizing English in their curriculums has minimized this concern.

Made easier by the growth of English as the international academic language, the Internet, and the relative ease of air transportation, large numbers of academics work outside of their own countries. The many incentives include better salaries and working conditions, academic freedom, stability in academic careers, high-quality universities and an excellent academic job market. Singapore, the Arabian Gulf nations, some western

¹¹⁴ Altbach, "The Imperial Tongue: English as the Dominating Academic Language," 58.

¹¹⁵ Ibid., 59.

¹¹⁶ Marginson, "Globalization and Higher Education," 21.

¹¹⁷ Rugh, "Arab Education: Tradition, Growth and Reform," 402.

European countries, Canada, and the United States have policies in place to lure scholars and researchers from abroad. Flows tend to be from the developing countries toward more advanced economies.¹¹⁸

¹¹⁸ Altbach, “Trends in Global Higher Education: Tracking an Academic Revolution,” 20.

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IV. INTERNATIONALIZATION OF HIGHER EDUCATION

A. ORIGIN OF UNIVERSITIES

Universities first arose in Europe during the later Middle Ages (c. 1150–1500). The *universitas* was a corporation or guild of masters (professors) and scholars (students).¹¹⁹ The basic European university model, established first in Italy and France at the end of the twelfth century, has been significantly modified but remains the universal pattern of higher education. The Paris model placed the professor at the center of the institution and enshrined autonomy as an important part of the academic ethos. The university rapidly expanded to other parts of Europe—Oxford and Cambridge in England, Salamanca in Spain, Prague and Krakow in Central Europe – and a variety of institutions in the German states were established in the thirteenth century. Northern universities generally patterned themselves after the University of Paris, which had a system of faculty governance. Southern universities, on the other hand, usually were patterned after the University of Bologna, which was student-controlled.¹²⁰ The universities in medieval Europe had a common teaching language, Latin, the *Lingua Franca* of European education and science at the time. They also had a similar organizational structure, a common curriculum with common texts, and similar admission and graduation requirements, which were all supervised by higher authority.¹²¹

Later, the European imperialist nations brought universities to their colonies with the British exporting their academic model first to the American colonies, and later to India, Africa, and Southeast Asia. The French in Vietnam and West Africa, the Spanish and Portuguese throughout Latin America, the Dutch in Indonesia, the Americans in the

¹¹⁹ John C. Scott, “The Mission of the University: Medieval to Postmodern Transformations,” *The Journal of Higher Education* Vol.77 No.1 (2006): 6

¹²⁰ Ibid.

¹²¹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 121.

Philippines, and other colonial powers also exported academic institutions.¹²² The first foundation in the western hemisphere was the University of St. Thomas Aquinas in Santo Domingo (founded in 1538).¹²³

B. ORIGIN OF FOREIGN BRANCH CAMPUS

Branch campuses date back to the institutions founded by the Roman Catholic universities in the Philippines and Latin America led by religious orders like the Jesuits. Universities in Europe set up branch institutions or sponsored new schools in the colonies such as the British and French institutions in Africa and Asia and Dutch institutions in today's Indonesia. Another group comprises the American type of liberal arts colleges founded by American Protestant missionaries in Turkey (Robert College, 1863), Lebanon (American University of Beirut, 1866) and Egypt (American University of Cairo, 1919).¹²⁴ American universities have long-standing branch campuses in various major European cities. These have traditionally been small international centers dedicated to short-stay study arrangements for expatriate Americans. Many of those in Europe date back to the post-World War II period, when they were opened to provide military personnel stationed in Europe and their dependents access to U.S. institutions. Troy University, a public institution in Alabama, is operating a network of eleven branch campuses that started fifty years ago to serve U.S. military personnel abroad.¹²⁵

Branch campuses, in principal, are operated directly by the parent institution with faculty traveling to teach courses they have developed in short periods of one to two weeks. Franchise universities are institutions operating on behalf of the home institutions overseas. Local providers operate franchises and local instructors teach courses according to syllabi prepared and supervised by the parent institution, which acts as a quality assurance agent. The cost of attending a franchise institution is one-fourth to one-third of

¹²² Philip Altbach, *American Higher Education in the Twenty-First Century: Social, Political, and Economic Challenges* (Baltimore, Md: Johns Hopkins University Press, 2005), 16.

¹²³ J. Lafaye, "Literature and Cultural Life in Colonial Spanish America," in *Cambridge History of Latin America: Vol. 2 Colonial Latin America*, ed. L. Bethell (Cambridge, England: Cambridge University Press, 1984), 676.

¹²⁴ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 105.

¹²⁵ Ibid., 151.

what it would cost the student to attend the parent institution. “Twinning” or “joint degree” programs, are collaborative arrangements between institutions where a student does part of his or her studies at the home institution and the rest in the foreign institutions abroad.¹²⁶

Branch or offshore campuses are formal cross-border higher education (CBHE) initiatives structured from the outset with the intent of awarding participating students with a joint degree in the name of the participating partners or under the brand name of the foreign participating university even though none of the education may have taken place in the university’s country.¹²⁷ It is becoming common under branch campus arrangements for students to receive degrees from the foreign university that set up that campus even though it is not located in the country where the higher education took place. Awarding the degree in the name of the foreign university collaborator can address a concern often raised by education experts about cross border education, namely that “quality” may be compromised.¹²⁸ If a prestigious international university allows its name to be used on the degree, this sends a strong signal to prospective students and their future employers that quality standards were high. Under branch campus arrangements, students receive a degree either in the name of the foreign university or jointly in the name of both partner universities.¹²⁹

C. EVOLUTION OF THE AMERICAN UNIVERSITY

The structure of the American university originated with the colonial model, imported from England, and combined with the German research university idea of the nineteenth century to produce the modern American university.¹³⁰ In the mid-nineteenth century, a newly united Germany harnessed the university for nation building. Under the leadership of Wilhelm von Humboldt, German higher education was given significant

¹²⁶ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 106.

¹²⁷ Kritz, “Globalization and Internationalization of Tertiary Education,” 3.

¹²⁸ Dirk van Damme, “Quality Issues in the Internationalization of Higher Education,” *Higher Education* Vol. 41 No. 4 (June, 2001): 415, (accessed November 17, 2009 via JSTOR)

¹²⁹ Kritz, “Globalization and Internationalization of Tertiary Education,” 3.

¹³⁰ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 134.

resources by the state, took on the responsibility for research aimed at national development and industrialization, and played a key role in defining the ideology of the new German nation. German universities also established graduate education and the doctoral degree.¹³¹ Until the turn of the nineteenth century, American universities were teaching institutions—small liberal arts colleges. As students returned from Germany and assumed positions in academia, this all changed. Benjamin Franklin (1706-1790) was the first American to visit a German university when he visited Gottingen University in 1766. Between 1815 and 1914, there was an extraordinary migration of approximately 10,000 American students to Germany. Students from Harvard, Yale and other universities on the East Coast started to attend German universities in increasing numbers. Gottingen, Berlin, and Heidelberg were favored destinations. In the year 1890, American students accounted for 21.9 percent of the enrollment at Gottingen. From the middle of the nineteenth century onward, the German research university model permeated American higher education, diminishing British influences.¹³² In 1867, the Johns Hopkins University opened in Baltimore, marking the birth of the American university model where research, professional schools and graduate studies developed within the same institution.¹³³ The idea of the unity of teaching and research became central to other new universities like MIT (founded 1860) in New England, Cornell (founded 1868) in the East, Chicago (founded 1890) in the Midwest, Texas A&M in the West (founded 1867), and Berkeley (founded 1866) and Stanford (founded 1895) on the West Coast.¹³⁴

The American system has always been a mixed one, although ownership (whether private or public), and control (whether private or public), and financing (whether private or public), and the mixtures in-between have been very unstable over time.¹³⁵ The original nine colonial institutions, starting with Harvard in 1636, were, with one

¹³¹ Altbach, *American Higher Education in the Twenty-First Century: Social, Political, and Economic Challenges*, 17.

¹³² Guruz, *Higher Education and International Student Mobility in the Global Economy*, 132.

¹³³ Cowley, *International and Historical Roots of American Higher Education*, 137.

¹³⁴ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 132.

¹³⁵ Clark Kerr, “The American Mixture of Higher Education in Perspective: Four Dimensions,” *Higher Education* Vol. 19 No. 1 (1990): 12, (accessed November 17, 2009 via JSTOR).

exception, part private and part public in their initiatives. Private sector institutions, after the colonial period, originated mostly through initiatives by religious organizations. They were protected from public absorption by the Supreme Court in the Dartmouth College Case (1819), which validated the private contract that established Dartmouth. The first strictly state initiated universities were Georgia (1785) and North Carolina (1795). They were state initiated and owned, but with independent boards of trustees from the very start. The colonial colleges were their models. They followed an early accepted tradition of comparatively limited direct public control, and started the tradition of the independent public institution.¹³⁶ In 1862, President Lincoln signed the Land Grant College Act (also known as the “Morrill Act” because Representative John S. Morrill of Vermont sponsored it),¹³⁷ which provided the stimulus for publicly-supported higher education.¹³⁸

The 1862 legislation also resulted in equal admissions for women, especially in the Midwest and West, as the new state institutions almost immediately became coeducational. The second Morrill Act of 1890 went beyond land endowments by also furnishing annual federal funding, as did the earlier Hatch Act of 1887.¹³⁹ Both new and existing state colleges and universities received federal funds. This legislative activity encouraged the states to provide similar financial support, which continues today. The 1890 Act also authorized public support for Black land grant colleges and universities. States that denied admission to their land grant institutions based on race were required to establish parallel institutions for their Black residents. Representatives of this type of institution are Tuskegee University, Florida A&M University, and Tennessee State University.¹⁴⁰ The landmark "Wisconsin Idea" (1904) realized most completely the

¹³⁶ Kerr, “The American Mixture of Higher Education in Perspective: Four Dimensions,” 12.

¹³⁷ Cowley, *International and Historical Roots of American Higher Education*, 118.

¹³⁸ Ibid., 121.

¹³⁹ Scott, “The Mission of the University: Medieval to Postmodern Transformations,” 17.

¹⁴⁰ Ibid.

public service ideal among state universities during the early 20th century. This was due to the commitment of the University of Wisconsin to serve the entire population of that rural state.¹⁴¹

D. EDUCATION HUBS

Until the 1890s, internationalization largely meant the exchange of students and scholars, the teaching of foreign languages, and the inclusion in the curricula of courses on different countries and cultures, and programs in international relations and area studies.¹⁴² In the second half of the twentieth century, international organizations like the OECD, UNESCO, the World Bank, and supranational bodies like the European Union (EU) started to take an interest in education. While the nineteenth century witnessed the “nationalization” of higher education with the emergence of the nation-state, the second half of the twentieth century saw the interaction of governmental policies and views espoused by international organizations.¹⁴³

The internationalization of higher education has reached the national agenda in a wide range of countries. Qatar, the UAE and Singapore stand out as examples of countries taking rather dramatic steps to promote internationalization as a matter of national policy. These countries developed strategies to attract foreign institutions but have the added effect of attracting students from the region. Increased regionalization in higher education has occurred as a result.¹⁴⁴ Their strategies have focused on the recruitment of prestigious foreign universities to establish local campuses, with the goal of expanding access to the local student population and serving as higher education "hubs" for their regions.¹⁴⁵ Also, global knowledge spaces are being created where multiple institutions and private firms from different countries are brought together

¹⁴¹ J. S. Brubacher and W. Rudy, *Higher Education in Transition* (New York: Harper and Row, 1976), 32.

¹⁴² Guruz, *Higher Education and International Student Mobility in the Global Economy*, 137.

¹⁴³ Ibid.

¹⁴⁴ Kimberly Koch and Madeleine F. Green, “Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States,” 10.

¹⁴⁵ C. Barrow, “Globalization, Trade Liberalization, and the Trans-nationalization of Higher Education,” 28.

within one space. These may take the form of a branch/overseas/foreign campus, a joint research center, or perhaps relatively deep transnational linkage schemes (joint and dual/double degrees, or international consortia of universities).¹⁴⁶

Education City Qatar¹⁴⁷ in Doha, Qatar is hosting Carnegie Mellon University, Georgetown University, Northwestern University, Texas A&M University, Virginia Commonwealth University, and Weill Cornell Medical College. Dubai Knowledge Village¹⁴⁸—soon to add Dubai International Academic City (DIAC)—in Dubai of the UAE is hosting Boston University, Harvard University, London School of Business & Finance, Michigan State University, and Rochester Institute of Technology. Not to be outdone, Abu Dhabi is hosting Johns Hopkins University, MIT, New York University, and the Sorbonne of France and is now constructing Abu Dhabi University City¹⁴⁹ that will be completed in 2012.

In an effort to shift its economic focus to the development of knowledge-based industries in the 1980s, the city-state of Singapore looked to bring foreign higher education institutions and students to its shores. In 1999, Singapore announced its plan to attract at least ten world-class foreign higher education institutions by 2009 and 150,000 international students by 2015. The Global Schoolhouse strategy, as it is called, has exceeded its goals. By 2007, there were fifteen foreign institutions operating niche programs mainly for international students in Singapore. In 2006, Singapore enrolled more than 80,000 foreign students, an eleven percent increase from the previous year. These branch campuses and partnership programs have solidified Singapore as a gateway for students who want a western education taught in English that also provides access to Chinese language instruction and China's business market.¹⁵⁰ Singapore's Global

¹⁴⁶ Global Higher Education, “Education Cities, Knowledge Villages, Schoolhouses, Education Hubs, and Hotspots: Emerging Metaphors for Global Higher Ed,” The Global Higher Ed Blog, April 16, 2008, <http://globalhighered.wordpress.com> (accessed December 3, 2009)

¹⁴⁷ The Qatar Foundation, <http://www.qf.edu.qa> (accessed Dec 11, 2009).

¹⁴⁸ Dubai Knowledge Village, <http://www.kv.ae/en/default.asp> (accessed Dec 11, 2009).

¹⁴⁹ Abu Dhabi University City, <http://www.aduc.ae> (accessed Dec 11, 2009).

¹⁵⁰ Kimberly Koch and Madeleine F. Green, “Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States,” 10.

Schoolhouse¹⁵¹ is hosting or collaborating with numerous institutions to include Johns Hopkins University, MIT, Georgia Institute of Technology, University of Pennsylvania, University of Chicago, Technische Universiteit Eindhoven, Technische Universität München, Carnegie Mellon University, Stanford University, Cornell University, Duke University, Karolinska Institutet, University of New South Wales ESSEC, University of Nevada, Las Vegas, IIM Bangalore, SP Jain Centre of Management, New York University, DigiPen Institute of Technology and Queen Margaret University and INSEAD of France. Other initiatives worldwide include Bahrain Higher Education City¹⁵², Kuala Lumpur Education City¹⁵³ in Malaysia and Incheon Free Economic Zone¹⁵⁴ in South Korea.

E. THE BOLOGNA DECLARATION

Internationalization has reached prominence at regional and international levels. On May 25, 1998, the ministers in charge of higher education in France, Italy, the United Kingdom, and Germany met in Paris to sign the Sorbonne Declaration, which invited governments and institutions to harmonize academic services and university provision and to redefine the structure of the European higher education system. On June 19, 1999, twenty-nine ministers met in Bologna, the site of the oldest university in the world, and signed the Bologna declaration. The Bologna Declaration has a clearly defined goal that is the creation of a coherent European higher education area by 2010.¹⁵⁵

The Bologna Process involves forty-six nations and seeks to create the European Higher Education Area (EHEA) through harmonization of degree structures, enhancement of credit transfer, and increased European student mobility.¹⁵⁶ It is hoped

¹⁵¹ The Singapore Schoolhouse, http://www.sedb.com/edb/sg/en_uk/index/news_room/publications/singapore_investment2/singapore_investment0/singapore_the_global.html (accessed October 19, 2009).

¹⁵² Bahrain Higher Education City, <http://www.bahrainedb.com/education.aspx> (accessed October 19, 2009).

¹⁵³ Kuala Lumpur Education City, <http://www.klec.com.my> (accessed October 19, 2009).

¹⁵⁴ Incheon Free Economic Zone, <http://eng.ifez.go.kr> (accessed October 19, 2009).

¹⁵⁵ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 146.

¹⁵⁶ Kimberly Koch and Madeleine F. Green, “Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States,” 11.

that the EHEA will achieve a common, Europe-wide framework of understanding around tertiary education and lifelong learning, with significant cross-border intelligibility of degrees and qualifications, and a high level of quality, attractiveness, and competitiveness on a global scale.¹⁵⁷

The Bologna agreement stems from a goal set by EU education ministers to grow educational degree production as part of a common effort to increase economic growth by investing in educational growth.¹⁵⁸ One facet of this policy became a commitment to increase international enrollments within EU countries by removing barriers to degree and credit transfer through greater harmonization of degree types to a two-cycle structure: undergraduate or first degrees of three years in length, and second or master's degrees of two years. A primary mechanism for achieving harmonization is the "diploma supplement," a standardized description of the degree a student has earned that is appended to a student's diploma so that anyone evaluating that credential can understand the nature and structure of the degree awarded. To internationalize, European institutions are increasingly offering programs in English, enhancing their attractiveness to international students.¹⁵⁹

F. HIGHER EDUCATION EXPORTERS

The United States faces significant competition in the rapidly expanding world of international study. Competitors have several major advantages. They have national policies relating to international study and cross-border higher education initiatives. They have been setting goals, putting policies into place, and giving incentives to academic institutions to attract foreign students. The United States, in contrast, has never had a national approach to international higher education, and the federal government has

¹⁵⁷The Bologna Declaration, http://74.125.95.132/search?q=cache:mPtmv1BNBncJ:www.bolognaberlin2003.de/pdf/bologna_declaratio n.pdf+bologna+declaration+1999&cd=1&hl=en&ct=clnk&gl=us (accessed March 1, 2009)

¹⁵⁸Jane V. Wellman, "Apples and Oranges in the Flat World: A Layperson's Guide to International Comparisons of Postsecondary Education," American Council on Education Center for Policy Analysis (2007) <http://www.acenet.edu> (accessed December 15, 2009).

¹⁵⁹ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 11.

provided scant support for it.¹⁶⁰ Current U.S. practice in the recruitment of international students is largely a matter of the initiatives of individual institutions.¹⁶¹

At the national level, the U.S. Department of State's Bureau of Educational and Cultural Affairs sponsors Education USA,¹⁶² a network of professional educational advisers and education information centers that promotes U.S. higher education worldwide and offers international students information on the application process, admissions requirements, potential scholarship funding, visas, and everyday living in the United States. Education USA maintains a web site, produces brochures in six languages, and operates 450 advising centers around the world. The bureau funds overseas regional and national educational advising coordinators to organize conferences and adviser training and to serve as a resource on national and regional trends. The bureau also provides U.S. institutions with opportunities to host overseas advisers and to visit advising centers around the world.¹⁶³ The federal government could play a more vigorous role by strengthening Education USA and by increasing the educational advising capacity of U.S. embassies around the world. NAFSA and other associations have called for a comprehensive U.S. policy to "marshal the vital resources for international education for national purposes."¹⁶⁴

Australia and the United Kingdom have formed national strategies to target the international education market. Australian Universities rely on foreign student fees for an average of fifteen percent of their overall funding.¹⁶⁵ Each of Australia's thirty-nine universities has an offshore provision of one form or another, and offshore programs offered by Australian institutions has increased to 1600 in 2003 with an enrollment of 55,189 students, up from twenty-five in 1991. More than eighty-five percent of these

¹⁶⁰ Altbach, "Higher Education Crosses Borders," 20.

¹⁶¹ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 13.

¹⁶² Education USA, <http://www.educationusa.state.gov> (accessed March 11, 2010).

¹⁶³ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 3.

¹⁶⁴ Ibid., 13.

¹⁶⁵ Sushi Das, "Foreign Students at Capacity Level; Era of Growth Over, Era of Consolidation to Begin," *The Age*, July 26, 2008, <http://www.theage.au> (accessed March 3, 2010).

programs are in China, Hong Kong, Malaysia and Singapore.¹⁶⁶ The Australian Education International (AEI), the international arm of the Department of Education, Employment and Workplace Relations, has recently opened offices in the Middle East and Latin America to attract students from a wider range of countries. Currently, approximately sixty-five percent of foreign students come from Asia, with half of them studying management and commerce, mostly in Melbourne and Sydney. Fee-paying overseas student numbers have risen dramatically, from ten percent in 1997 to almost twenty-six percent in 2006. Australia has the highest proportion (19 percent) of international students of any OECD country. It is the world's fifth-largest provider of higher education to international students, behind the U.S., Britain, Germany and France. Approximately 370,000 current students from 190 countries comprise Australia's third-largest export earner after coal and iron.¹⁶⁷

In 2006, then Prime Minister Tony Blair launched the second in a series of international education initiatives (PMI2), which aimed to “secure the U.K.’s position as a leader in international education and sustain the growth of U.K. international education delivered in the U.K. and overseas.”¹⁶⁸ The targets for 2011 set by the initiative include the recruitment of an additional 100,000 international students and doubling the number of countries that send more than 10,000 students per year to the United Kingdom. The plan targets twenty-four countries and focuses on improving the reputation of higher education in the UK and other education sectors in the international arena through marketing campaigns and the development of partnerships. The UK Education brand was developed for the PMI2 and uses the slogan “Innovative. Individual. Inspirational.” A network of British Council offices located in more than 100 nations markets the U.K. higher education sector to potential students using this brand and offers information on scholarship opportunities.¹⁶⁹

¹⁶⁶ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 108.

¹⁶⁷ Das, “Foreign Students at Capacity Level; Era of Growth Over, Era of Consolidation to Begin,” 1.

¹⁶⁸ Kimberly Koch and Madeleine F. Green, “Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States,” 4.

¹⁶⁹ Ibid.

The most striking characteristic of the rapidly evolving Gulf higher education sector is the wholesale adoption of the American university model. GCC higher education systems are being structurally synchronized with their U.S. counterparts in terms of accreditation and curricula and the American academic model now dominates in this region. Accreditation achieved through American regional and professional associations will facilitate transfers to U.S. institutions and entrance to U.S. graduate programs for prospective students.

While the British and Australians have set up a number of degree programs and even campuses in the Gulf, they still operate in the shadow of American institutions that have gained preeminence throughout the region.¹⁷⁰ The use of English as a medium of instruction has been embraced without reservation, in contrast to the bitter confrontations in other parts of the Arab world over the use of former colonial languages over Arabic.¹⁷¹

American higher education is the leader in the doctoral sector. The United States possesses seventeen of the world's top twenty research universities, and fifty-four of the top 100. It draws and holds talented doctoral students, postdoctoral researchers and established faculty from everywhere.¹⁷² American research universities are unique in the extent to which they focus on the doctoral level in recruiting foreign students. Whereas in 2003 just 4.7 percent of foreign students in Australia and 9.4 percent of those in the United Kingdom were doctoral students, in the United States in 2004-2005, 18.1 percent of all foreign students in higher education were enrolled at the doctoral level, and 30.8 percent in research-intensive universities.¹⁷³ In 2001, scientists and social scientists in the United States published 200,870 papers in recognized international journals, almost a third of world output, and the United States accounted for forty-four percent of citations in the world scientific literature.¹⁷⁴

¹⁷⁰ Fasano, "GCC Countries: From Oil Dependence to Diversification" 4.

¹⁷¹ Ibid.

¹⁷² Marginson, "Globalization and Higher Education" 22.

¹⁷³ Ibid., 23.

¹⁷⁴ S. Vincent-Lanclin, "Building Capacity through Cross-border Tertiary Education" (paper presented to the UNESCO/OECD Australia Forum on Trade in Educational Services, Sydney, Australia, October 11-12, 2004) <http://www.oecd.org/dataoecd/43/25/33784331.pdf> (Accessed November 3, 2009).

University rankings simplify the complex world of higher education in two areas of great public and private interest: institutional performance, and institutional status. In the United States, the annual U.S. News and World Report (USNWR) survey, which commenced in 1983, has been influential in determining institutional prestige, influencing flows of students, faculty and resources and shaping institutional strategies designed to maximize U.S. News scores.¹⁷⁵ Worldwide rankings have been dominated by the Shanghai Jiao Tong University Institute of Higher Education (SJTUIHE) Academic Ranking of World Universities, which commenced in 2003 and by the annual Times Higher Education Supplement World University Rankings that were launched in 2004. Rankings have given a powerful impetus to intranational and international competitive pressures and have the potential to change policy objectives and institutional behaviors.¹⁷⁶ International rankings favor universities that use English as the main language of instruction and research, are older, possess a large array of disciplines and programs, and receive substantial research funds from government or other sources.¹⁷⁷

The U.S. higher education system is the only one in the world in which private higher education dominates the top tier. Few other systems have any private elite universities. For the two most prominent global rankings of universities, sixty-three universities make the top 100 in both rankings, and twenty-one of those are private, with all twenty-one being American institutions.¹⁷⁸

G. INTERNATIONAL STUDENTS

The number of students pursuing tertiary education has skyrocketed over the past thirty-seven years, growing five-fold from 28.6 million in 1970 to 152.5 million in 2007. This translates into an average annual increase of 4.6 percent, with the average number of tertiary students doubling every fifteen years. The expansion has been particularly intense since 2000, with 51.7 million new tertiary students enrolled around the world in just

¹⁷⁵ Marginson, “Globalisation and Higher Education,” 55.

¹⁷⁶ Ibid.

¹⁷⁷ Altbach, “Trends in Global Higher Education: Tracking an Academic Revolution,” 12.

¹⁷⁸ Ibid., 84.

seven years.¹⁷⁹ Globally, the percentage of the age cohort enrolled in tertiary education has grown from nineteen percent in 2000 to twenty-six percent in 2007.¹⁸⁰

In 2007, over 2.8 million students were enrolled in educational institutions outside of their country of origin. This represents 123,400 more students than in 2006, an increase of 4.6 percent. The global number of mobile students has grown by fifty-three percent since 1999 (with an average annual increase of 5.5 percent) and by 2.5 times since 1975 with an average annual increase of 11.7 percent throughout this period. The period from 1994 to 2004 alone witnessed a forty-one percent jump in internationally mobile students from 1.75 to 2.46 million, possibly the biggest surge in the number of foreign students in history.¹⁸¹ Similarly, the number of female mobile students has increased and this at an even faster rate. In 1999, it was estimated that forty-six percent of total mobile students were female; this proportion rose to forty-nine percent in 2007.¹⁸²

The United States hosts the largest number and share of the world's mobile students at 595,900 and 21.3 percent respectively. It is followed by the United Kingdom (351,500), France (246,600), Australia (211,500), Germany (206,900), Japan (125,900), Canada (68,500), South Africa (60,600), the Russian Federation (60,300) and Italy (57,300). These eleven countries host seventy-one percent of the world's mobile students, with sixty-two percent of them studying in the top six countries.¹⁸³ The combined foreign student enrollment in the United States, United Kingdom, Australia, Canada, and New Zealand—the major English-speaking destination countries (MESDC)—accounted for nearly half the global enrollment. This is a clear indication of the nature of the global demand that targets higher education provided in English, particularly the American type

¹⁷⁹ Albert Motivans et al, *Global Education Digest 2009* (Montreal, Canada: The UNESCO Institute for Statistics, 2009), <http://www.uis.unesco.org> (Accessed January 15, 2009).

¹⁸⁰ Altbach, "Trends in Global Higher Education: Tracking an Academic Revolution," 38.

¹⁸¹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 163.

¹⁸² Motivans, *Global Education Digest 2009*, 10.

¹⁸³ Ibid.

of higher education, which accounts for nearly a quarter of the foreign students enrolled worldwide. Projected demand for higher education in these countries is 2,614,000 by 2020.¹⁸⁴

The mobility of international students involves two main trends. One consists of students from Asia entering the major academic systems of North America, Western Europe, Australia, and Japan. The other trend, within the EU, involves various programs to encourage student mobility among EU countries. Traditionally, international student mobility reflected a South-North phenomenon.¹⁸⁵ Additional flows take place from Africa and Latin America to Europe and North America.¹⁸⁶ The rising numbers of foreign students opting to study in places like China, Singapore, Qatar, and Abu Dhabi represent notable variations on this traditional mobility, and there is a growing South-South movement that indicates the emergence of regional hubs.¹⁸⁷ Of the 52,579 international students enrolled in South Africa in 2004, approximately sixty-eight percent came from the Southern African region and a total of 86.6 percent came from the South or from the developing world.¹⁸⁸

International student flows are responsive to geographic proximity and historical ties and cultural affinities between sending and receiving countries, as well as to their relative GDP differential. While flows within Western Europe and North America (Canada and the USA) are between countries at comparable levels of development, elsewhere students flow to countries that have higher levels of GDP.¹⁸⁹ Today's post-secondary students flowing to Australia, Europe, and North America are likely to come from another country in their region or, if they come from a greater distance, to be from China, Korea, India, Japan, Malaysia, Morocco, Singapore, or Taiwan. Among the largest

¹⁸⁴ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 164.

¹⁸⁵ Altbach, "Trends in Global Higher Education: Tracking an Academic Revolution," 8.

¹⁸⁶ Ibid.

¹⁸⁷ P. Agarwal, *The Dynamics of International Student Circulation in a Global Context* (Rotterdam, Netherlands: Sense Publishers, 2008), 247.

¹⁸⁸ Ibid.

¹⁸⁹ Kritz, "Globalization and Internationalization of Tertiary Education," 23.

senders, only China and India are low-income countries, but they have large and growing middle classes that go abroad to do their higher education studies.¹⁹⁰

The largest producers of students abroad in 2004 were led by China with 343,126 (a substantial increase from 2002 when there were 184,664), followed by the U.S. at 191,321, India at 123,559 (in 2002 there were 87,978), Korea at 95,850 and Japan at 60,424 (a decrease from 62,744 in 2002).¹⁹¹ Except for Japan, higher education systems in the Asia-Pacific Rim countries are characterized by demand exceeding supply, little public subsidy and relatively high levels of tuition fees, and large shares of private institutions.¹⁹² Currently nine of the top ten countries with students in the U.S. are in Asia.¹⁹³

The movement of students and higher education across borders has become a growth industry. OECD estimated that \$30 billion was traded by OECD countries in 2000¹⁹⁴ while another estimate of the international education market prepared by Merrill Lynch placed its size at \$2 trillion in 1999.¹⁹⁵ The 2005 Open Doors Report had an estimate that international students contributed over \$13 billion to the U.S. economy in 2005.¹⁹⁶ In 2006–07, the Department of Commerce estimated that international education contributed \$15.5 billion to the U.S. economy during that academic year.¹⁹⁷ During the period 1989-2001, revenues from foreign students in the United States grew from \$4.47 billion to \$11.141 billion. The net contribution of foreign students to the U.S. economy in

¹⁹⁰ Kritz, "Globalization and Internationalization of Tertiary Education," 28.

¹⁹¹ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 166.

¹⁹² Ibid., 167.

¹⁹³ Mary E. McMahon, "Higher Education in a World Market: An Historical Look at the Global Context of International Study," *Higher Education* Vol. 24 No. 4 (December, 1992): 476 (accessed January 10, 2009 via JSTOR).

¹⁹⁴ OECD 2004, *Internationalization and Trade in Higher Education: Opportunities and Challenges* (Paris: OECD, 2004), 13
<http://new.sourceoecd.org/vl=475271/cl=13/nw=1/rpsv/~6678/v2004n13/s1/p11> (Accessed December 9, 2009).

¹⁹⁵ Anil Hira, "The Brave New World of International Education." *The World Economy* Vol.26 No.6 (2003): 911.

¹⁹⁶ Hey-Kyung Koh Chin, ed., *Open Doors 2005: International Educational Exchange* (New York: Institute of International Education, 2005), 4.

¹⁹⁷ R. Bhandari, ed., *Open Doors 2008: International Educational Exchange*. (New York: Institute of International Education, 2008), 15.

2003 was estimated at \$12.851 billion and rose to \$13.290 billion in 2004, of which \$8.997 billion came from tuition fees paid by foreign students.¹⁹⁸ The vast majority of these students come from Asia, although neighboring countries Mexico and Canada continue to be strong sources as well. Since 2002, India has sent the highest number of students to the United States—94,563 students in 2008, a thirteen percent increase from 2007. China sends the second highest number of students (81,127 in 2008), followed by South Korea and Japan.

H. STUDY ABROAD PROGRAMS

Study Abroad programs in the Middle East originated with the Ottoman Empire in 1720 when the Sultan Ahmet III sent delegations of scholars to Europe in order to obtain translations of Western scientific books. This pattern reached its peak during the reign of Mohamed Ali (r. 1805–49), when dozens of modern institutions of higher learning were established on the European model, mainly in Egypt.¹⁹⁹ The study-abroad program for Arab students began in the early decades of the twentieth century. Iraq was the first Arab state to send some of its promising students abroad to study in Egypt, Syria, Europe and the United States during the 1930s. The Iraqi missions lasted for decades, but declined after the Baath government came to power in 1963. During the 1960s, 1970s and 1980s, Saudi Arabia and other Gulf states sent tens of thousands of students to study in Arab and western universities. With increased wealth came a shift from Arab to Western universities, particularly to the U.S. as Saudi students favored North American universities. The number of Gulf students in foreign universities rose consistently from the early 1970s until the early 1980s, when it started to decline because of the slump in oil prices and the development of national universities.²⁰⁰

The MENA region accounts for seven percent of the world's mobile students. Across the region, 2.9 percent of all tertiary students pursue their studies overseas, which is a slight increase since 1999 by 0.5 percentage points. The outbound mobility ratio

¹⁹⁸ Guruz, *Higher Education and International Student Mobility in the Global Economy*, 172.

¹⁹⁹ Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 3.

²⁰⁰ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 22.

varies widely across countries from 0.3 percent in Egypt to 74.0 percent in Djibouti. Between 1999 and 2007, the range of ratios has risen from two percent to eleven percent in Bahrain, Kuwait, Qatar and Yemen. In contrast, the shares of students going abroad fell slightly in Jordan, Morocco and the Palestinian Autonomous Territories. Approximately fifty-seven percent of the region's mobile students pursue their studies in Western Europe. Since 1999, however, there has been a steady rise in the number of students staying within the region or going to East Asia and the Pacific (mainly Australia and Malaysia). France is the major destination for mobile students from Algeria (accounting for 91 percent of its mobile students), Djibouti (74 percent), Morocco (69 percent) and Tunisia (62 percent). The remaining students from the region tend to be scattered across a larger group of countries: Australia, Canada, Germany, Italy, Jordan, Malaysia, Morocco, Saudi Arabia, Ukraine, the United Kingdom and the United States.²⁰¹

The Erasmus program in Europe is the largest Study Abroad program in the world. It was set up in 1987 under the auspices of the Socrates program, Europe's education program, and permits European nationals to spend three to twelve months of study in another European country. Thirty-one European countries currently participate in the Erasmus program. The program aimed to increase the mobility of students in order to develop the European dimension of higher education. Student mobility was seen as a powerful means to support the creation of an internal market of professionals and qualified workers and the creation of a European attitude.²⁰² Supported by the European Commission, by 2004, over 1.2 million students and 2000 tertiary institutions had participated in Erasmus. In 2003/2004, there were 135,586 European students receiving financial support from Erasmus. The United Kingdom is the biggest net importer of Erasmus-funded students followed by Ireland, Sweden, and the Netherlands. Growing numbers of U.S. students also participate in Study Abroad programs as 174,629 did so in 2002/03, up from 76,302 ten years earlier. Most U.S. students travel to Europe to study (63.5 percent in 2002), but that percentage has declined slightly in recent years. While

²⁰¹ Motivans, *Global Education Digest 2009*, 46.

²⁰² Van Damme, "Quality Issues in the Internationalization of Higher Education," 419.

Latin America receives the second largest percentage of U.S. students (15 percent), Oceania and Africa are increasingly attractive destinations for U.S. students. Most U.S. nationals have to self-finance their study abroad but some students, on a needs basis, receive subsidies from their universities.²⁰³

²⁰³ Kritz, “Globalization and Internationalization of Tertiary Education,” 28.

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V. MENA REGION EDUCATION DEMOGRAPHICS

A. STUDENT POPULATION GROWTH

Over the last decade, the world population is estimated to have grown from 5.9 billion²⁰⁴ to more than 6.7 billion.²⁰⁵ Today, more than 1.5 billion people are between the ages of ten and twenty-five, representing the "largest-ever generation of adolescents."²⁰⁶ The most recent UNESCO²⁰⁷ figures estimate that there are some 150.6 million tertiary education students globally. This is roughly a fifty-three percent increase over UNESCO's 2000 estimate of 98.3 million tertiary students worldwide. UNESCO data suggest that globally, the gross enrollment ratio for tertiary education has grown by thirty-seven percent over the period from 2000 to 2007, from nineteen percent to twenty-six percent.²⁰⁸ Most of the most dramatic growth in overall youth numbers over the last decade has occurred in the developing world, while particularly robust increases in higher education enrollment have been seen in regions such as East Asia and the Pacific, Central and Eastern Europe, and Latin America and the Caribbean.²⁰⁹

The MENA region has experienced a unique population growth pattern over the past fifty years. The total population increased 3.7 times during this period, from 100 million in 1950 to approximately 380 million in 2000.²¹⁰ In the Gulf monarchies, the population increased over seven-fold from the 1950s, when the population of the six countries was at 4 million, to 2000 when it reached 30 million.²¹¹ Annual average growth

²⁰⁴ U.S. Bureau of the Census, *World Population Profile: 1998* (Washington, DC.: USBC, 1998), <http://www.census.gov/ipc/www/idb/worldpopinfo.html> (accessed April 21, 2009).

²⁰⁵ U.S. Bureau of the Census, *World Population Profile: 2008* (Washington, DC.: USBC, 2008), <http://www.census.gov/ipc/www/idb/worldpopinfo.html> (accessed April 21, 2009).

²⁰⁶ United Nations Population Fund, *Framework for Action on Adolescents and Youth* (New York: UNPF, 2007), 3.

²⁰⁷ UNESCO Portal on Higher Education Institutions, http://portal.unesco.org/education/en/ev.php-URL_ID=49864&URL_DO=DO_TOPIC&URL_SECTION=201.html (Accessed April 1, 2009).

²⁰⁸ Ibid.

²⁰⁹ Altbach, "Trends in Global Higher Education: Tracking an Academic Revolution," 98.

²¹⁰ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 96.

²¹¹ Ibid.

rate for 2000–2010 is estimated at 1.2 percent for the world, 1.5 percent for developing countries, and 2.5 percent for the Arab states.²¹² No other region of the world has grown as rapidly, and the population in this region is expected to reach 580 million by 2025.²¹³

Currently, the population of 15-to-24-year-olds accounts for 21.5 percent (approximately 70 million) of the regional population, while another forty-five percent is less than fifteen years of age.²¹⁴ The youth population represents an overwhelmingly large share in the total population. The population of 5-to-18-year-olds in the Arab states is projected to be 110 million by 2010. If the enrollment ratio in general education is eighty percent, the Arab states will have to ensure educational opportunities for 88 million students by 2010.²¹⁵

MENA countries (excluding Djibouti and Yemen) have almost reached full primary education enrollment and have increased enrollment in secondary schools almost three-fold since 1970 and five-fold at the higher education level.²¹⁶ The MENA region does well on spending on education as a proportion of Gross National Product (GNP) compared to East Asia and Latin America. As a whole, the Arab states devote between 5.4 percent of their GNP to education, which is equal to the level in North America, higher than the global average of 4.9 percent, and higher than levels in all other areas of the world (South Asia is 3.3 percent, East Asia 2.9 percent, Latin America 4.6 percent,

²¹² Gabriella Gonzalez, ed., *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates* (Qatar: Rand-Qatar Policy Institute, 2008), 4.

²¹³ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 97.

²¹⁴ Ibid.

²¹⁵ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 4.

²¹⁶ Mourad Ezzine, “Education in the Arab World: Shift to Quality in Math, Science, Technology Faltering,”

World Bank Fast Briefs No.20 (February, 2009), <http://go.worldbank.org/OXADZV71I0> (Accessed August 22, 2009).

and Europe 5.3 percent). Education takes between 13.0 and 25.0 percent of national budgets in almost every Arab country; only Lebanon, where private education is very strong, is lower at 8.2 percent.²¹⁷

Enrollments in higher education in the Arab world by 1997 had reached fifteen percent of the total age cohort, which was only slightly below the world average of seventeen percent. Average enrollment in the Arab region was higher than the average for less developed nations as a whole (10 percent) but only one quarter of the rate in the most developed countries (61 percent). Arab female enrollment in higher education in 1997 was further behind at only 12.4 percent compared to the world total of 16.7 percent, but it was growing rapidly, having risen from 8.6 percent in 1990 compared to the world female total then of 13 percent.²¹⁸

In addition to the high level of public spending and the expansion of enrollment, wide access to education has been assured in most MENA countries through a policy of free education for all that was enacted mostly in the 1950s and 1960s. This policy was generally applied at all levels of education, from basic to tertiary. Education was considered by many countries as a right; this was especially true in the Maghreb countries, Egypt and Syria. As a result of these policies, the region had achieved more equality in the distribution of education in 1970 than most countries from East Asia and Latin America.²¹⁹

The greatest achievement for the MENA region has been the closing of the education gender gap. Illiteracy rates have also been halved in the past twenty years and the absolute difference between male and female adult literacy rates is declining rapidly. On average, adult literacy rates among MENA countries have doubled since 1970 (from 38 percent to 72 percent). Adult literacy rates today range from twenty-nine percent for Djibouti (estimation) to ninety-three percent for Kuwait. Algeria, Iran, Saudi Arabia, and

²¹⁷ UNESCO, *World Education Report 2000* (New York: UNESCO, 2000), 164–66.

²¹⁸ UNESCO, *Higher Education in the Arab States* (Beirut: UNESCO, 2002), 6.

²¹⁹ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 24.

Tunisia have made the most progress in raising adult literacy over the last 35 years. Egypt and Morocco have increased their adult literacy rates the least over the same period.²²⁰

The GCC states present a highly uneven spending pattern, with Kuwait and Saudi Arabia spending on average 6.3 percent, Oman and Bahrain 3.9 and 3.6 percent respectively, and the UAE only 1.7 percent of GDP on education.²²¹ There seems to be no correlation between the affluence of a country and its spending on education as a proportion of the GDP among the MENA countries. High investment in education has not translated into economic growth in the region. Criticism is especially acute of the role of the public sector as an employer and the perceived advantages associated with working for the government.²²²

Tertiary education enrollment in the Gulf monarchies has increased substantially from 1980 when the average enrollment was six percent to 2003 when the average was twenty-three percent, which translates to a four-fold increase in only two decades.²²³ In the GCC countries, an average of seventy percent of all university students in 2002-2003 majored in education, humanities and social sciences (Qatar was 67.4 percent and the UAE was 71.4 percent). The equivalent average for all MENA countries was sixty-three percent while those for East Asia and Latin America were fifty-four and fifty-seven percent respectively.²²⁴ This pattern of enrollment of MENA enrollment is historically consistent with a policy of absorbing most university graduates into civil service jobs, which is ill-suited to a development strategy that draws on private initiatives and dynamic manufacturing and service sectors.²²⁵

²²⁰ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 24, 176.

²²¹ Ibid., 10.

²²² Ibid., 47.

²²³ Ibid., 13–15.

²²⁴ Ibid., 21.

²²⁵ Ibid., 22.

B. EDUCATION DEFICIENCIES

Public education in the six Gulf monarchies is similar in that the curriculum of schools and colleges continues to be dominated by Islamic and Arabic studies.²²⁶ A large majority of students opt for the less demanding humanities and social science courses where the teaching and textbooks are mostly in Arabic. Altogether, only 22.6 percent of MENA students pursue science, technical, and engineering degrees, compared to about thirty percent in the industrializing Asian countries of China, Indonesia, South Korea, Malaysia, Philippines, and Thailand. In the GCC, 6.27 percent of students in 2005 were enrolled in engineering subjects, about half the proportion in industrialized countries.²²⁷ At all levels of education there is much more emphasis on academic learning than on vocational and technical training. This unpopularity of vocational training can be explained by the public's attitude as many people in the Gulf still value white-collar jobs much more than blue-collar ones.²²⁸ The educational system and Gulf societies as a whole need to emphasize the importance of acquiring and developing managerial, technical, and operational skills. The educational system in the six Gulf monarchies is still in the process of crossing the gap from a traditional and religious type of schooling to a modern and secular one. Its main focus has been to produce civil servants.²²⁹

Commenting on the deficiencies of Arab university graduates, a Saudi businessman stated: "typically they have high technical knowledge but they are very weak in communication skills, they can neither write well in English nor in Arabic. They cannot make a presentation, their computer skills are also very weak, and there is a major issue with weak analytical skills."²³⁰ Another successful businessman, an Egyptian, observed: "We need graduates who are computer-literate, understand basic management principles, who have knowledge, are creative and self-driven, self-motivated, looking

²²⁶ Bahgat, "Education in the Gulf Monarchies: Retrospect and Prospect," 131.

²²⁷ OxResearch, "Shift to Quality in Education Faltering," May 20, 2008, (accessed 12 November, 2009 via Proquest)

²²⁸ Bahgat, "Education in the Gulf Monarchies: Retrospect and Prospect," 131.

²²⁹ Ibid.

²³⁰ Abdelaziz Sugair, "Arab Education" (speech presented to an AMIDEAST-sponsored conference on Arab education in Marrakech, Morocco, March 13, 2002).

beyond their borders and have the ability to understand and express complex concepts."²³¹ He agreed that even in Arabic, university graduates had weak communication skills.²³¹

Higher education in the Arab region suffers from a considerable shortage of teachers. In 2005, the student-teacher ratio was 25:1, compared to the global average of 16:1. The Arab student-teacher ratio is the highest among all regions of the world, including sub-Saharan Africa. The Arab region needed some 154,000 additional members on its educational staffs. This signifies that the higher education system in the Arab region does not provide sufficient human resources with higher academic qualifications, especially doctoral degrees, to meet the needs of its teaching staffs.²³² In combination with this teacher shortage, rote learning still dominates teaching, and little emphasis is put on problem solving and interactive teaching methods that would demand initiative from students. Foreign language and science do not make up a sufficient share of the curricula.

C. BRAIN DRAIN

The Arab region is considered one of the most active in terms of the export of highly qualified human capital equipped with university degrees. It is estimated that forty-five percent of Arab students who study abroad do not return to their home countries, that thirty-four percent of skilled doctors in Britain are Arabs, and that the Arab world has contributed thirty-one percent of the skilled migration from developing states to the West, including fifty percent of doctors, twenty-three percent of engineers, and fifteen percent of scientists.²³³ Scientifically qualified Arab human capital that migrates to the USA, Britain, and Canada forms seventy-five percent of all migrants, and

²³¹ Dr. Hossam Badrawi, "Arab Education" (speech presented to an AMIDEAST-sponsored conference on Arab education in Marrakech, Morocco, March 13, 2002).

²³² Fayiz Suyyagh, ed., *Arab Knowledge Report 2009: Towards Productive Intercommunication for Knowledge* (Dubai: United Nations Development Program, 2010) 114.

²³³ A.B. Zahlan, "The Arab Brain Drain, Innovation and Development." (paper presented to the UNESCO Conference on Arab Brain Drain, Amman, Jordan, November 27–December 1, 2004).

the annual percentage of Arab university graduates who migrate is twenty-five percent. Global estimates suggest that the Arab countries suffer annual losses of \$1.57 billion due to human capital flight.²³⁴

Human capital flight offers employment opportunities to university graduates that domestic markets cannot absorb, and secures important financial resources that range between five and ten percent of the GDP of some Arab countries.²³⁵ The financial remittances sent by Arab migrants are considered among the most important factors contributing to development and the provision of foreign currency in a large number of impoverished Arab countries. The total sum of financial remittances sent to the Arab region in 2006 was over \$25 billion.²³⁶

Egypt in particular has seen massive migration of university graduates. 1.4 million Egyptian workers currently work in GCC countries; many of the numerous Arab Gulf colleges are run by Egyptian faculty.²³⁷ In the 1960s, and particularly in the 1970s, Egyptian migration abroad started to acquire much larger dimensions, until by 1976 that year's census was to report 1,425,000 Egyptians residing outside the country.²³⁸ The early 1960s saw a large migration of its academics, scientists, professionals, and technicians. From 1962 to 1972, some 28,000 individuals left Egypt as declared permanent migrants, with 3.4 percent of graduates in scientific fields departing in 1962 and rapidly increasing to 51.5 percent in 1968.²³⁹

The war in Iraq has essentially destroyed almost all remnants of academic life there. Lebanon's civil wars have fractured its universities along sectarian lines and unleashed waves of violence that have paralyzed the country. Egypt's swelling population has overwhelmed its once-stellar universities, with an increasingly authoritarian government clamping down on the last vestiges of free speech and academic autonomy.

²³⁴ A.B. Zahlan, "The Arab Brain Drain, Innovation and Development." 1.

²³⁵ Suyyagh, *Arab Knowledge Report 2009: Towards Productive Intercommunication for Knowledge*, 208.

²³⁶ Ibid.

²³⁷ Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 2.

²³⁸ Nazih Ayubi, "The Egyptian Brain Drain: A Multidimensional Problem," *International Journal of Middle East Studies* Vol. 15 No. 4 (November, 1983): 431.

²³⁹ Ibid.

As a result, scholars have left in droves. In the past thirty years, twenty-three percent of Arab engineers, fifty percent of Arab doctors, and fifteen percent of Arab bachelor-of-science degree holders have emigrated. Roughly twenty-five percent of the 300,000 graduates from Arab universities in 1996 emigrated from the region, and between 1998 and 2000, more than 15,000 Arab doctors left as well.²⁴⁰ Until recently, most went to Europe or the United States; now, more and more of them from the traditional academic centers of the region are going to the Arabian Gulf.

The Gulf has been spared most of the violence and instability that has paralyzed places like Iraq and Lebanon. Although there are no democracies in the region, its benevolent emirs and sheiks are a far cry from autocratic rulers like Egypt's Hosni Mubarak or Syria's Bashar Al-Assad. Each emirate has its own peculiarities, but the region is generally defined by broad freedoms relating to speech and expression - especially when compared with draconian censorship laws in neighboring countries. Though the native populations in these emirates tend to be relatively conservative, the governments have been happy to afford great social liberties to foreigners, with hardly any legal restrictions on dress, alcohol, or gender roles.²⁴¹ These migration trends toward the stable Gulf countries will further enhance the future success of foreign branch campuses as academic professionals will be more inclined to stay for extended periods of employment.

D. STATE EMPLOYMENT

Public sector employment in oil-producing countries provides a means for both distributing oil and oil-related wealth throughout the economy. Under state ownership, workforce regulations include job security guarantees, social security programs, high public sector wages with generous nonwage benefits, sharp restrictions on firing, and other job-stabilizing policies.²⁴² The distorted wages and generous non-wage benefits offered by the public sector have resulted in unrealistically high wage expectations that

²⁴⁰ Zvika Krieger, "Desert Bloom," *The Chronicle of Higher Education* Vol. 54, Iss. 29 (2008): 26-28.

²⁴¹ Ibid., 27.

²⁴² Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 225.

have exacerbated the unemployment problem.²⁴³ The rise of the public sector in employment became a key factor in segmenting labor markets, with an employment structure skewed toward women and educated groups. In the oil-producing economies of the GCC, it also contributed to severe labor-market segmentation along national-expatriate lines where the wage and benefit differential between expatriate laborers and nationals is tremendous. In most GCC countries, expatriate workers now account for about three-fourths of the total workforce²⁴⁴

Until recently, public sector employment was almost a guarantee in the region for persons with higher or intermediate education. The share of the government in total employment in the region has been estimated at about fifteen percent, far above the six percent average in the developing world at large.²⁴⁵ As a result, laborers in the region have often sought educational credentials for the sole purpose of securing public sector employment. By rewarding educational credentials in public employment with higher wages, governments in the region have encouraged investment in types of human capital that are not necessarily designed to prepare students to meet the requirements of a modern market economy, but to meet the needs of growing bureaucracies. As a result, individuals in the region have often sought higher degrees to better their chances for public sector jobs, but with little attention to content or quality.²⁴⁶ GCC states have also adopted strategies of subsidization of national employees in the private sector, further preserving the high wage expectations of national laborers and such labor regulation has been a critical constraint to development as small and medium-sized companies must hire national employees at inflated wages instead of hiring low-wage expatriates.²⁴⁷ In effect,

²⁴³ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 227.

²⁴⁴ Ibid., 225.

²⁴⁵ OxResearch, “Shift to Quality in Education Faltering,” May 20, 2008, (accessed November 12, 2009 via Proquest)

²⁴⁶ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 227.

²⁴⁷ Ibid, 234.

employment in government jobs is another form of the social welfare system put in place by the ruling elite in the resource-rich Gulf countries.²⁴⁸

E. UNEMPLOYMENT

Unemployment in the MENA region averages fourteen percent higher than every other region of the world except Sub-Saharan Africa.²⁴⁹ Over the 1980s and 1990s, unemployment in the region doubled from about eight percent to fifteen percent. In a few countries, the unemployment rate reaches close to twenty percent or higher, including Algeria (23.7 percent), Morocco (19.3 percent), and the West Bank and Gaza (25.6 percent).²⁵⁰ In 1997, unemployment rates were estimated at fifteen percent in Bahrain, fifteen percent in the UAE, twelve percent in Saudi Arabia and almost twenty percent in Kuwait.²⁵¹ The problem affects virtually every country in the region, even several oil-exporting Gulf economies, which traditionally had to import expatriate laborers to supplement the national workforce. In Oman, Qatar, and the UAE, labor force participation rates for male and female nationals are fifteen to forty percentage points lower than the rate for non-nationals.²⁵² Cultural and religious reasons keep the rate of labor force participation for female nationals considerably lower than that for male nationals, despite the fact that female nationals attain higher educational levels.²⁵³ Unemployment has disproportionately impacted those with higher levels of education, with a considerably higher probability of being unemployed for those with more than

²⁴⁸ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, xix.

²⁴⁹ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 212.

²⁵⁰ Ibid.

²⁵¹ Onn Winckler, “The Demographic Dilemma of the Arab World: The Employment Aspect,” *Journal of Contemporary History* Vol. 37 No.4 (2002): 627.

²⁵² Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, xix.

²⁵³ Ibid.

secondary education. In Egypt, citizens with secondary-level education attainment or greater make up only forty-two percent of the labor force but account for eighty percent of the unemployed.²⁵⁴

F. FOREIGN LABOR

Despite the drive to “nationalize” the workforce, foreign workers still constitute the majority of the labor force in the GCC. In 2002, 8 million out of the 12–13 million workers were expatriates, and one-third of all foreign workers were Arabs. In 1995, total employment in the GCC was around 9.6 million, compared to 2.9 million in 1975. The share of nationals fell from sixty-one percent in 1975 to twenty-six percent in 1995 despite the increase in the employment of nationals from 1.7 to 2.5 million during the same period. The growth rate of employment of foreign workers was much higher than that of nationals—6.2 percent annually compared to 1.9 percent. Saudi Arabia was the largest importer of labor, accounting for about 72.0 percent of all non-nationals in the GCC in 1975 and 56.4 percent in 1995.²⁵⁵

Foreign workers have been an important part of the labor force in the Gulf States for several decades. Their contribution to the socio-economic development in the region is substantial. It is estimated that ninety percent of the major development projects in the Gulf have been conceived, planned, designed, constructed and equipped by foreign consulting, contracting and engineering firms.²⁵⁶ This heavy dependence on expatriates can be explained by the availability of financial resources and the lack of human ones.²⁵⁷ Migration enabled the Gulf States to have a construction boom and build up infrastructure. It also provided the skilled human capital necessary to provide social services and other public goods. Currently, foreign workers also contribute to the labor market by filling jobs that cannot be filled by locals.²⁵⁸ In 2000, international migrants

²⁵⁴ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 212.

²⁵⁵ Ibid., 248.

²⁵⁶ El-Sanabary, *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*, 48.

²⁵⁷ Bahgat, “Education in the Gulf Monarchies: Retrospect and Prospect,” 132.

²⁵⁸ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 265.

accounted for over ten percent of the population in eleven of the region's twenty countries, and for over thirty percent in seven countries (Qatar, Kuwait, United Arab Emirates, Bahrain, Israel, Jordan, and Palestine).²⁵⁹

The six members of the GCC have very large migrant populations. Between them, they had nearly 10 million foreign-born residents in about 2000 equating to one-third of their total population. This migrant population, largely composed of temporary workers of Asian and Arab origin, has expanded considerably in the past forty years. Already under way in the 1930s and 1940s with the fledgling oil industry, the influx of foreign labor in the Gulf countries began to accelerate substantially in 1973-74 with the increase in oil revenues and in industrial and infrastructure investment in these countries. Saudi Arabia, which hosted only 300,000 migrants in 1970, now has more than 5 million.²⁶⁰ In the United Arab Emirates, the data show a rise from 60,000 migrants in 1970 to 2 million in 2000.²⁶¹ These six Gulf countries have seen their migrant population expand ten-fold since 1970, and forty-fold since 1960.²⁶²

The pattern of migration by origin in the GCC has changed over time. The proportion of Arabs among expatriates declined from seventy-two percent in 1975 to less than thirty percent in 2002.²⁶³ By 1975, the number of Arab migrant workers in the Arabian Gulf oil countries was estimated at 1.3 million, increasing to 2.1 million in the early 1980s. By mid-1990, on the eve of the Iraqi invasion of Kuwait, the Arab migrants in the Gulf oil countries numbered approximately 3.0 million (including family members). In addition, approximately 1.3 million Egyptians were working at that time in Iraq, Libya and Jordan.²⁶⁴ The biggest drop occurred in Saudi Arabia and Kuwait. In Saudi Arabia, the foreign population in 1995 was 6.26 million, of which 38.0 percent

²⁵⁹ Dominique Tabutin, "The Demography of the Arab World and the Middle East from the 1950s to the 2000s: A Survey of Changes and a Statistical Assessment," *Population* Vol. 60 No. 5/6 (Sep.-Dec., 2005): 574.

²⁶⁰ Tabutin, "The Demography of the Arab World and the Middle East from the 1950s to the 2000s: A Survey of Changes and a Statistical Assessment," 576.

²⁶¹ Ibid., Appendix Table A13.

²⁶² Ibid., 576.

²⁶³ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 248.

²⁶⁴ Winckler, "The Demographic Dilemma of the Arab World: The Employment Aspect," 623.

were Arab migrants and 53.4 percent were Asians.²⁶⁵ The Asian population outnumbered Arab migrants by about 1 million. The highest concentrations of foreigners in Saudi Arabia, in descending order, are from India, Egypt, Pakistan, Philippines, Bangladesh, and Yemen.²⁶⁶

One of the main effects of the Gulf War in 2001 was the massive departure from Kuwait and Saudi Arabia of Jordanian, Egyptian, and Yemeni workers. Yasser Arafat's decision to publicly support Saddam Hussein in the 1991 Gulf War was particularly disastrous for Palestinian expatriates in GCC countries, particularly Kuwait, which terminated their employment contracts and forced them to leave their countries. Kuwait was known to have been one of the GCC nations with a strong Arab presence, but that trend changed after the 1991 Gulf War. During the 1990s, the number of Arabs in Kuwait dropped by 33.6 percent, while the number of Asians rose by about 50.0 percent. Arabs accounted for only 45.5 percent of the total foreign population in Kuwait in 2000.²⁶⁷

By 1996, migrants of Arab origin accounted for only thirty-one percent of all foreigners. Asians had become the largest contingent of foreign workers in the six countries, their share ranging from fifty-seven percent in Kuwait to eighty-six percent in Oman. In the late 1990s, India, Pakistan, Bangladesh, and Sri Lanka were the main countries of origin of Asian workers. Regional conflicts played a role in these shifts in the composition of the migrant population. Asian workers are also seen as more "controllable" as they are less politicized and less inclined to protest than Arab expatriates.²⁶⁸ In spite of the large decline in the number of Arab workers in 2000 and the substantial increase in the number of Asians, Arabs still held the majority of high-skill occupations while Asians held the bottom three categories. Jobs in sales seem to have swung toward Arabs in 2000. The picture that emerges, assuming that Kuwait in 2000 is

²⁶⁵ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 248.

²⁶⁶ Ibid.

²⁶⁷ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 248.

²⁶⁸ Tabutin, "The Demography of the Arab World and the Middle East from the 1950s to the 2000s: A Survey of Changes and a Statistical Assessment," 577.

representative of the Gulf region, is that Asian migrant workers are hired in all occupations but with a distinct bias toward low-skill categories. The opposite is true for Arabs.²⁶⁹

G. FEMALE STUDENTS

The rapid expansion of tertiary education has also been fueled by the increasing participation of women. Globally, the number of women enrolled in tertiary institutions grew almost twice as fast as that of men. While the number of male students quadrupled from 17.7 to 75.1 million between 1970 and 2007, the number of female students rose six-fold from 10.8 to 77.4 million.²⁷⁰ Similarly, the number of female mobile students has increased at an even faster rate. In 1999, it was estimated that forty-six percent of total mobile students were female; this proportion rose to forty-nine percent in 2007.²⁷¹

The adjusted gender parity index (GPI), represents the ratio of male and female gross enrollment to express disparities on a comparable scale for both sexes. According to the global average, tertiary enrollment ratios of men and women reached parity around the year 2003 but since then, the average global participation of females has been exceeding that of males. In 1970, the GPI shows that the male enrolment ratio was almost 1.6 times as high as that of women; but by 2007, the opposite is true with a female participation ratio that is 1.08 times as high as that of men.²⁷² In North America and Europe, the female participation ratio is one-third higher than for men. Disparities also favor women in Latin America and the Caribbean as well as in Central Asia. Today, male and female enrolment ratios in the Arab States are almost identical, indicating gender parity. If trends continue, women will soon take the lead in that region as well.²⁷³

Decades of research have found an important link between the expansion of basic education and economic development. Girls' education has an even more positive effect. Girls' education yields some of the highest returns of all development investments,

²⁶⁹ Galal, *The Road Not Traveled: Education Reform in the Middle East and North Africa*, 250.

²⁷⁰ Motivans, *Global Education Digest 2009*, 15.

²⁷¹ Ibid., 10.

²⁷² Ibid., 15.

²⁷³ Ibid.

yielding both private and social benefits that accrue to individuals, families and society at large.²⁷⁴ Every year of schooling increases a girl's individual earning power by ten to twenty percent, while the return on secondary education is even higher, in the fifteen to twenty-five percent range. Additionally, women reinvest ninety percent of their income back into the household, whereas men reinvest only thirty to forty percent.²⁷⁵ Educated girls who become mothers are more likely to send their children to school, passing on and multiplying benefits. Children of educated mothers have higher survival rates and tend to be healthier and better nourished.²⁷⁶

Human capital is created and the quality of human input in production is significantly improved by spending on education. Benefits come in the form of increased production over the lifetime of a person with more education and broader skills.²⁷⁷ The higher the level of educational attainment, the greater the participation of women in the labor force. In Sudan, the probability that a female will participate in the labor market increases from eight to thirty-eight percent if she has completed secondary education. Similarly, in Singapore, the chance of a woman participating in the labor force is twenty-one percent if she has no schooling, twenty-nine percent if she has primary schooling, sixty-eight percent if she has secondary education, and seventy-six percent if she has attended university.²⁷⁸ Education, especially at the lower level, contributes to the alleviation of poverty, a more equal distribution of income, and an improved social environment²⁷⁹.

Young women in the MENA region are a strong human capital resource. Throughout the region, they show higher performance and more ambition than their male counterparts—as measured by exam results, school completion rates, and willingness to

²⁷⁴ Ricardo Hausmann et al., *The Global Gender Gap Report 2009* (Geneva, Switzerland: World Economic Forum, 2009), 39.

²⁷⁵ Ibid.

²⁷⁶ Hausmann, *The Global Gender Gap Report 2009*, 40.

²⁷⁷ George Psacharopoulos, “Education as an Investment,” *Finance & Development* (September 1982): 42

²⁷⁸ Ibid.

²⁷⁹ George Psacharopoulos, “Education as an Investment,” 42.

move into new job fields.²⁸⁰ The GCC has seen a dramatic increase in female enrollments, eclipsing rates for males. Class repetition and dropout rates are generally higher for males. Net enrollment rates today are slanted in favor of girls in more than half the MENA countries. At the secondary level, young women are ahead in two-thirds of these countries.²⁸¹ In Kuwait, seventy-seven percent of those who successfully passed the 2003 final secondary school exams were girls. In 2001, nineteen percent of Kuwaiti women, as compared to fifteen percent of Kuwaiti men, had attained education beyond high school.²⁸²

In higher education, however, female students have not been completely liberated from traditional customs. For example, the idea of sending female students abroad for higher education is still objectionable in the GCC. A female student going for postgraduate studies abroad must be accompanied by a *Mahrum* (a male relative serving as a chaperon).²⁸³ While tens of thousands of Gulf males go to universities abroad each year, female graduates must be educated in their countries. In general, about sixty percent of graduates of Gulf universities today are female although only a small percentage of these graduates have entered the workforce.²⁸⁴

Lodging can also be a barrier for women. Tertiary education institutions are typically located in urban areas, limiting access for rural students and even more so for female students, since families may be less inclined to permit daughters than sons to live outside the home in mixed-gender environments in urban areas. Many countries have addressed this constraint by providing boarding facilities segregated by gender, with adequate space to accommodate ever greater numbers of women. Tunisia addressed

²⁸⁰ Cheryl Benard, "Fixing What's Wrong—and Building on What's Right - With Middle East Education," *SAIS Review Vol. XXVI No.2* (Summer-Fall 2006): 39.

²⁸¹ Benard, "Fixing What's Wrong - and Building on What's Right - With Middle East Education," 41.

²⁸² Amir Taheri, "Women in Kuwait," 16 July 2003,
<http://www.townhall.com/columnists/GuestColumns/Taheri20030716.shtml>.

²⁸³ Bahgat, "Education in the Gulf Monarchies: Retrospect and Prospect," 133–134.

²⁸⁴ James Coffman "Higher Education in the Gulf: Privatization and Americanization" *International Higher Education* (Fall 2003): 2.

gender equity issues by building smaller campuses in locations around the country and in remote areas to provide higher education within commuting distance, obviating the need for students to live away from their families.²⁸⁵

The growing acceptance of higher education for young women in the MENA region is raising the average age of marriage, as it becomes customary for young women to delay marriage until graduation. Primary education for daughters now receives broad acceptance across all social classes, with few exceptions. Elite families are coming to see higher education as a suitable occupation for daughters prior to marriage.²⁸⁶

H. 9-11 RAMIFICATIONS

Before September 11, 2001, families who sought American higher education sent their children to the United States, Europe, or Canada. Since then, stricter student visa regulations, anti-Americanism, and difficulties that Arabs are encountering in living overseas have caused Arab students to look for regional institutions of American-style higher education.²⁸⁷ Under new U.S. Citizenship and Immigration Services regulations, weeks to months are required to issue a U.S. student visa to a student from the Middle East. Students with common Arabic names, such as Muhammad, Osama, or Abdullah, must have their names cleared by the Department of Homeland Security in the United States. This process can take several months, with no guarantees that students will be approved, and often causes them to miss their admission deadlines.²⁸⁸

After the events of September 11, 2001, U.S. enrollments of international students briefly dipped, as visa restrictions tightened and perceptions grew in some countries that America no longer welcomed international students. At the same time, for the past decade, other countries have been intensifying their efforts to bring international students to their institutions. As a result, the U.S. share of the growing international student

²⁸⁵ Salmi, “Constructing Knowledge Societies: New Challenges for Tertiary Education,” 55.

²⁸⁶ Benard, “Fixing What’s Wrong - and Building on What’s Right - With Middle East Education,” 41.

²⁸⁷ American Civil Liberties Union, “Racial Profiling: Old and New,” www.aclu.org/racialjustice/racialprofiling/index.html (accessed February 25, 2010).

²⁸⁸ Ghabra, “Studying the American way: An Assessment of American-Style Higher Education in Arab Countries,” 2.

market fell from twenty-eight percent to twenty percent between 2000 and 2006.²⁸⁹ Some GCC governments have decided to transfer a large portion of their scholarships previously designated for study in the United States to Canadian universities.²⁹⁰ The number of students applying to study in the U.S. from Saudi Arabia and Kuwait fell by twenty-five percent.²⁹¹

In response to the events of September 11, 2001, the federal government developed the Student Exchange Visitor Information System (SEVIS) to improve tracking of international students in the United States. In September 2009, a new generation of the system, SEVIS II, was launched in an effort to streamline procedures and create a more user-friendly process. An international student applying to study in the United States will typically pay a SEVIS I-901 fee, which doubled from \$100 to \$200 in fall 2008, and a visa fee of \$131 charged by the Department of State. Students enrolled in U.S. undergraduate and graduate programs may extend their stay upon completion of their degree for up to eighteen months for Optical Practical Training (OPT).²⁹²

Academic and civil liberties groups believe the Bush Administration increased its use of heightened security measures, introduced after the 2001 terrorist attacks, to keep out foreign scholars whose politics or ideas it did not like. In such cases the government does not give reasons for denying a visa, making it nearly impossible to challenge the decision, academic advocates say. Opponents of the government's policy have forced small concessions from the authorities through lawsuits brought in two of the best-publicized cases. One suit, filed by the ACLU on behalf of several academic groups, challenged the government's use of the so-called ideological exclusion clause of the USA Patriot Act to keep out Tariq Ramadan.²⁹³ The prominent Swiss scholar of Islam had his

²⁸⁹ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 1.

²⁹⁰ Ugo Fasano and Zubair Iqbal, "GCC Countries: From Oil Dependence to Diversification" *International Monetary Fund* (2003): 5 <http://www.imf.org> (accessed January 11, 2010)

²⁹¹ Polly Curtis, "Fall in US Overseas Student Market," *Guardian Unlimited London*, November 4, 2003, 1.

²⁹² Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 4.

²⁹³ Burton Bollag, "Scholars Kept Out," *The Chronicle of Higher Education* Vol. 53 Iss. 41 (Jun 15, 2007): 41.

visa revoked in 2004, preventing him from taking up a teaching job at the University of Notre Dame. At the time, U.S. officials referred to a provision of the act that allow them to deny a visa to anyone who "endorses or espouses terrorist activity" or "persuades others" to do so. But after a federal judge ruled in 2006 that the government had to provide an explanation, the authorities presented a new reason: donations totaling about \$800 that he had made to two European groups providing humanitarian assistance to the Palestinians. The two groups were later blacklisted by the Bush administration for allegedly providing "material support" to Hamas, the senior partner in the Palestinian Authority. In another case in 2007,²⁹⁴ Riyadh Lafta, a prominent Iraqi professor of medicine at Al-Mustansiriya University, in Baghdad, was unable to enter the United States to give a long-planned lecture at the University of Washington and work with colleagues there on a research project on increased rates of cancer among children in southern Iraq. Mr. Lafta was one of the principal authors of an October 2006 article in the British medical journal, *The Lancet*, which estimated that more than 650,000 Iraqis—many more than officially reported—had died as a result of the American-led invasion.

²⁹⁴ Burton Bollag, "Scholars Kept Out," *The Chronicle of Higher Education* Vol. 53 Iss. 41 (June 15, 2007): 41.

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VI. QATAR

A. HISTORY

Qatar is a relatively small country on the western coast of the Arabian Gulf, covering approximately 11,525 square kilometers, including a number of islands. More than a century ago, in 1907, British official sources stated that Qatar's total resources consisted of 1,430 camels, 250 horses, and 817 pearl boats, with a population just shy of 30,000.²⁹⁵ Pearls were the mainstay of the Qatari economy, as the only export to speak of. Agriculture was practically impossible and even the production of dates was limited. The territory now known as Qatar consisted of a small set of villages dependent on pearl diving, camel breeding, and fishing, and its society was governed by Islamic principles and tribal custom.²⁹⁶

Oil was discovered in Qatar in 1939 but World War II interrupted oil exploitation, and oil production did not begin on a commercial scale until 1949.²⁹⁷ The market for natural pearls, which had come under considerable competitive pressure from new Japanese cultured pearls during the 1920's, dried up completely. As a result, the economy collapsed and roughly half the population left the peninsula.²⁹⁸ Rupert Hay, the British Political Resident, described Doha at the end of the 1940s as "little more than a miserable fishing village straggling along the coast for several miles and more than half in ruins ... there was no electricity, and the people had to fetch their water in skins and cans from wells two or three miles outside of town."²⁹⁹

²⁹⁵ Jill Crystal, *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar* (New York: Cambridge University Press, 1995) 33.

²⁹⁶ Cathleen Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy* (Qatar: RAND-Qatar Policy Institute, 2007), 7.

²⁹⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 36.

²⁹⁸ Connor P. Spreng, *Policy Options for Interventions in Failing Schools* (Santa Monica, CA.: RAND, 2005), 157.

²⁹⁹ Crystal, *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar*, 41.

Politically, Qatar has been dominated by the Al-Thani family since the Turkish occupation in 1872 ended a period of dominance by the Khalifa family of Bahrain. The Ottoman Turks evacuated the Qatari peninsula at the beginning of World War I. In 1916, Abdullah Bin Ali Al Thani, the leader of a prominent family, signed a treaty with Britain that brought the peninsula into the trucial system to become a British protectorate. This meant that in exchange for Britain's military protection, Qatar relinquished its autonomy in foreign affairs and other areas, such as the power to cede, mortgage, or otherwise dispose of part of its territories or to enter into any relationship with a foreign government other than Britain without its consent. In turn, Britain did not interfere with domestic affairs or infrastructure development. Because of this relationship with Britain, Qatar, like the other trucial states of the region, remained relatively isolated and relied predominantly on pearl diving and fishing as its main staples of income.³⁰⁰ Britain terminated treaty arrangements with the Gulf States in 1968, and Qatar became an independent state on September 3, 1971.³⁰¹ Leadership shifts within the Al Thani family have occurred ever since. On February 22, 1972, Sheikh Khalifa Bin Hamad took control from the reigning emir, Sheikh Ahmad Bin Ali, who was hunting with his falcons in Iran. Sheikh Khalifa continued as Emir until 1995, when, following a downturn in the country's economy in the 1980s and early 1990s, Sheikh Hamad Bin Khalifah Al-Thani, the heir apparent and minister of defense at the time, came to power during a bloodless coup in which he deposed his father.³⁰²

His Highness the Emir Sheikh Hamad Bin Khalifah Al-Thani has pursued a path of openness towards the West by allowing the United States military to establish bases in Qatar (USAFCENT Command is located at Al Udeid air base on the outskirts of Doha). He has also been open to political change as well. In 1998, the Emir issued a decree setting up the framework for an elected municipal council of twenty-nine members, for

³⁰⁰ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 36.

³⁰¹ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 7.

³⁰² Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 36.

which both men and women could run and vote. By 2003, this council included one elected female member. In 1999, the Emir established a 32-member commission to develop a draft constitution specifying an elected parliament with legislative powers. A permanent constitution was ratified in April 2003. Although considerable powers remain with the ruling Al Thani family, the Advisory Council is to be expanded to forty-five members, thirty elected and fifteen appointed by the Emir. Voting is universal for all Qatari citizens over the age of eighteen. The constitution also guarantees freedom of expression, press, and religion, as well as the right of citizens to assemble and to establish civic and professional associations.³⁰³ As the ultimate power still rests with the Emir, however, Qatar remains an absolute monarchy for the foreseeable future.³⁰⁴

The Emir's political authority is not contested domestically, and the presence of a large number of American military forces provides a powerful security guarantee internationally. The Doha-based television station Al-Jazeera is renowned for being a voice for radical and controversial opinions that are otherwise muted or censored in the region and it is partially sponsored by the Qatari government. Among all journalists operating within Qatar itself, however, self-censorship is imposed without exception when it comes to Qatari political issues. Any stories regarding national security or the royal family in particular are strictly off limits.³⁰⁵

Under the leadership of the current Emir, Qatar has pursued an aggressive course of economic modernization. Most notable are the partial privatizations of the telecommunications monopoly Q-tel, the Qatar General Electricity and Water, the Qatar National Bank and the breakup of other major industries into quasi-private companies.³⁰⁶ Qatar recently allowed 100 percent foreign ownership in the agriculture, industry, health, education, and tourism sectors. Previous laws stipulated that foreigners could not own more than forty-nine percent of a business.³⁰⁷ At the heart of these reforms lies the

³⁰³ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 8.

³⁰⁴ EIU, *Qatar Country Profile* (London, UK: Economist Intelligence Unit, 2004), 1

³⁰⁵ Ibid.

³⁰⁶ EIU, *Qatar Country Profile* (London, UK: Economist Intelligence Unit, 2004), 3

³⁰⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 76.

attempt to eliminate some of the excesses of the welfare state that have developed in the past five decades, and are now perceived to be a hindrance to further development. The role of the state bureaucracy in oil exporting countries has traditionally not been one of resource extraction, as is the case in other countries, but instead one of resource distribution.³⁰⁸

The Qatar National Vision (QNV) 2030, launched in October 2008 by His Highness Sheikh Tamim bin Hamad Al Thani, Heir Apparent, defines long-term development outcomes for Qatar, and provides a framework within which national development strategies and implementation plans can be prepared. The QNV 2030 is based on the guiding principles of Qatar's permanent constitution and is underpinned by the four interrelated pillars of human development, social development, economic development and environmental development.³⁰⁹

B. NATURAL RESOURCES

Currently, oil and gas account for more than sixty percent of GDP, roughly eighty-five percent of export earnings, and seventy percent of government revenues. In 2005, Oil production in Qatar reached 7.6 million barrels per day (bbl/day), with proven oil reserves of 15.2 billion barrels estimated to continue for 23 years. Qatar's natural gas production reached 43.5 billion standard cubic meters, and its reserves account for more than five percent of the world total and are the third largest in the world, behind Russia and Iran. Qatar is expected to become the world's top exporter of liquefied natural gas (LNG) in the near future.³¹⁰ The offshore North Field's reservoir, covering a small area of 6,000 sq. km., boasts more reserves than the combined proven figure for the U.S. and Western Europe, as reported by BP, at 756 trillion cubic feet of gas.³¹¹ In total, Qatar has natural gas reserves of 904.06 trillion cubic feet and crude oil and condensate reserves of

³⁰⁸ Rosemarie Said Zahlan, *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman* (Reading, UK: Ithaca Press, 1998), 28.

³⁰⁹ Richard Leete et al., *Qatar National Vision 2030* (Doha, Qatar: General Secretariat for Development Planning, 2009), iii <http://www.gsdp.gov.qa> (accessed November 13, 2009).

³¹⁰ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 19.

³¹¹ Moin Siddiqi, "Qatar Stands Firm in the Face of Global Financial Crisis," *The Middle East* (July 2009: 48.

27.4 billion barrels (the world's thirteenth largest reserves).³¹² Qatar will account for twenty-five to thirty percent of global LNG supply by 2011.³¹³ Gas reserves are projected to last well over two centuries, depending on the projected rate of extraction.³¹⁴

C. POPULATION

In 1970, the Qatari government, assisted by British experts, carried out a census that reported a population of 111,113, of whom 45,039 were nationals. Qatar's population grew from about 422,000 in 1990, to about 617,000 in 2000, and then reached 1.4 million in mid-2008—more than tripling the population size in just eighteen years. Qatar's exceptionally rapid population growth, averaging sixteen percent per year between 2005 and 2008, is virtually unprecedented historically and globally. Most of this growth is attributable to unskilled and semi-skilled labor migration from South Asia and Southeast Asia (notably Indians, Pakistanis, Bangladeshis, Nepalese, Filipinos and Indonesians) and other countries of the Middle East and North Africa.³¹⁵ The population in 2009 was estimated at 1.63 million³¹⁶ with 250,000 Qatari nationals and per capita income has reached a staggering \$92,097 for native Qataris.³¹⁷ Qatar's per capita income in 2006 was \$50,600 for all residents and the highest rate among the GCC member states.³¹⁸ Real GDP growth averaged about ten percent per year in the second half of the 1990s, well above the 3.5 percent average of other GCC countries.³¹⁹ However, between 2004 and 2008, nominal GDP growth averaged 37.0 percent per year, meaning that in five years GDP jumped more than threefold to \$102.3 billion.³²⁰ In 2009, the country's GDP grew

³¹² Moin Siddiqi, "Qatar Stands Firm in the Face of Global Financial Crisis," *The Middle East* (July 2009: 48.

³¹³ Siddiqi, "Qatar Stands Firm in the Face of Global Financial Crisis," 48.

³¹⁴ EIU, *Qatar Country Profile*, 3.

³¹⁵ Leete et al., *Qatar National Vision 2030*, 16.

³¹⁶ Qatar Statistics Authority, <http://www.qsa.gov.qa> (accessed November 22, 2009).

³¹⁷ IMF 2008 estimate, <http://www.imf.org> (accessed November 22, 2009)

³¹⁸ Institute of International Finance, Inc., "Summary Appraisal, Gulf Cooperation Council Countries," August 15, 2006, 3.

³¹⁹ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 37.

³²⁰ Siddiqi, "Qatar Stands Firm in the Face of Global Financial Crisis," 48.

by only 11.0 percent, compared with 42.3 percent in 2008.³²¹ Per capita, Qatar is now the wealthiest member of the GCC and one of the wealthiest countries in the world.

In Qatar, non-nationals make up eighty one percent of the population and eighty-eight-percent of the labor force.³²² Forty percent of the population is Arab (19 percent is Qatari), twenty percent is Indian, ten percent is Filipino, thirteen percent is Nepali, seven percent is Pakistani, five percent is Sri Lankan, and five percent is of some other ethnic background.³²³ Qatar's share of expatriate workers remains significantly larger than that of Bahrain, Oman, and Saudi Arabia; of all the Gulf Cooperation Council (GCC) countries, only Qatar and Oman have seen no reduction in their expatriate labor force in the past five years.³²⁴ With the rapid expansion in development projects, especially in construction, by 2007, the ratio of Qataris to non-Qataris in the labor force was 1:12 compared to 1:6 in 2001.³²⁵ Among individuals age fifteen and over, males make up about seventy percent of the population as most non-Qataris are migrants who came to Qatar to work, and migrant workers tend to be male. Among Qataris, there is no gender imbalance. Instead, there is approximate parity between the numbers of men and women.³²⁶ Most Qatari nationals are Arabs and virtually all are Muslim, with the vast majority following Wahhabi Islam, a traditional version of Sunni Islam. Arabic is the primary language spoken and the official language of the government, but English is widely spoken and commonly used in business, especially in the private sector. Islam is the state's official religion.³²⁷

³²¹ Andrew Mills, "Failure of George Mason U.'s Persian Gulf Campus Sparks Concern," *The Chronicle of Higher Education* Vol. 55, Iss. 27 (March 13, 2009): 26.

³²² Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 27.

³²³ Ibid., 32.

³²⁴ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 10.

³²⁵ Leete, *Qatar National Vision 2030*, 15.

³²⁶ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 11.

³²⁷ Ibid., 2.

D. EMPLOYMENT

In 2002, Qatar formally ended the policy of automatic employment in the public sector for Qatari secondary and university graduates. According to Qatari Labor Law 3 of 1962, a vacant position must be first offered to a Qatari national; then, if it cannot be filled, it can be offered to a non-Qatari Arab, followed by a non-Arab foreigner. In May 1997, the Emir decreed that private-sector businesses had to ensure that at least twenty percent of their employees were Qatari nationals. The most recent five-year plan (2000–2005) had a target of fifty percent of jobs in the energy and industry sectors for Qataris. According to recent estimates, more than 1,300 Qataris are employed in the energy and industry sector, close to twenty-eight percent of the sector total.³²⁸ High-paying jobs continue to be available in the vast, over-staffed government bureaucracy. Despite changes toward privatization and a more dynamic economic marketplace, a recent survey found that more than eighty-six percent of all Qataris prefer to work for their government, while private companies prefer to hire foreign nationals.³²⁹

According to a 2007 survey of recent Qatari post-secondary and university graduates, Eighty-eight percent of male graduates were employed while only fifty-four percent of females were employed. One interesting pattern is that women tend to be employed in government ministries while men are more evenly distributed between employment in a ministry or in a company owned by the government (72 percent of women work for a ministry compared with 49 percent of men). One hundred percent of women worked for the government while ninety percent of males worked for the government. This partly reflects the fact that many women work as teachers and are therefore civil servants employed by the Ministry of Education. Women are more likely

³²⁸ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 79

³²⁹ J. Enrique, "Over 86 Percent Qataris Favour Govt. Jobs: Study," *The Peninsula*, February 20, 2003.

than men to work in a job that requires an advanced degree.³³⁰ Seventy-seven percent of the Qatari-national workforce is employed by the national government.³³¹

Nationally, the overall unemployment rate was just over two percent for males in 2001; it was about thirty percent for males age fifteen to nineteen and about nine percent for males age 20 to 24. For females overall, the unemployment rate, at nearly thirteen percent, was almost six times the overall rate for males, and the rate for females in the two youngest age groups was seventy-nine and forty-seven percent, respectively. Even among females age twenty-five to twenty-nine, the unemployment rate was nearly thirty percent.³³² The unemployment rate for non-Qataris was only 0.3 percent.³³³

In the 2007 survey, twenty percent of unemployed Qatari males and nearly sixty-six percent of unemployed Qatari females were not willing to accept employment in the private and mixed sectors. Among unemployed Qatari males who would not accept a private or mixed-sector job, the most common explanation was that wages were low (50 percent), followed by undesirable hours of work (31 percent), days of work (20 percent), and low social status (19 percent). For unemployed Qatari females, the most prominent concern was a mixed-gender work environment (76 percent), followed by low social status (53 percent).³³⁴

Employers interviewed in Qatar were not satisfied with the quality of skills possessed by Qatari secondary school and university graduates.³³⁵ Most employers viewed Qatari graduates' English skills as poor, and about half complained about poor communication skills. Poor technical skills were also frequently mentioned. Employers noted that Qatari graduates had poor work attitudes as well, and some specifically

³³⁰ Francisco Martorell, "A Survey of Recent Qatari Secondary School Graduates" *RAND-Qatar Policy Institute* (2007), 21.

³³¹ Catherine Augustine, "Aligning Post-Secondary Educational Choices to Societal Needs: A New Scholarship System for Qatar," *RAND-Qatar Policy Institute* (2008), 35.

³³² Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 53.

³³³ Qatar Statistics Authority, "Analytical Summary of the Labour Force Sample Survey Results," (October 2007), <http://www.qsa.gov.qa> (accessed November 22, 2009)

³³⁴ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 53.

³³⁵ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 30.

mentioned lack of loyalty or commitment to the company. Loyalty was particularly an issue for employers that had invested in employee training and then had the employees leave for organizations offering better pay and benefits. Employers mentioned that Qatari employees exhibited an unwillingness to work in shifts (especially on evening shifts) or outside Doha, and showed a lack of enthusiasm or motivation for the job.³³⁶ In addition, Qataris expected to be given a management or supervisory position regardless of their experience or qualifications. One interviewee noted that Qatari men were sometimes unwilling to work for female supervisors. And two noted that Qataris tended toward shyness, which sometimes made them reluctant to work in jobs dealing with the public.³³⁷

E. PUBLIC EDUCATION

Before oil was discovered, there was no formal education system in Qatar. Instead, some children in villages and towns memorized passages from the Qur'an and learned to read and write in *kuttabs*, informal classes taught in mosques or homes by literate men and women knowledgeable about Islam. The development of education in Qatar focused mainly on the male population.³³⁸ In 1956, the Ministry of Education was established, ushering in an era of free education for both males and females. And from 1956 to 1962, Qatari students received a monthly stipend. Expatriate children whose parents were employed by the government were eligible for free government education as well. Through the 1960s, Qatar imported entire education packages from Egypt, Jordan, and Syria—curricula and books, education structures, and teachers.³³⁹ Qatar's Ministry of Education schools are presently divided into three levels: primary (grades 1 through 6), preparatory (grades 7, 8, and 9), and secondary (grades 10, 11, and 12). Females and males attend separate schools, and their teachers are the same gender as they are. A significant number of private schools serve both Qataris and citizens of other countries.

³³⁶ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 29.

³³⁷ Ibid., 30.

³³⁸ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 41.

³³⁹ Ibid.

Qatar relies heavily on the Santa Monica, California-based RAND Corporation for advice on school improvement, and has focused its reform efforts on establishing a system of charter schools, called "independent schools," that is parallel to the country's traditional schools run by Qatar's Education Ministry.³⁴⁰

In 1973, Qatar's sole postsecondary education option was a teacher-training program with 150 students. In 1977, Qatar's only state-sponsored academically oriented university, Qatar University, was established. When it opened, Qatar University had four colleges—Education, Humanities and Social Sciences, Science, and Shari'a and Islamic Studies. In 1980, the College of Engineering was established, followed, in 1985, by the College of Administration and Economics. Qatar University presently offers six fields of study: humanities, education, sciences, Shari'a and law, business administration and economics, and engineering.³⁴¹ Qatar has instituted reforms to its national university, opened a number of branch campuses of post-secondary institutions that offer a variety of undergraduate degrees needed in Qatar's economy, and systematized Qatar's scholarship services for students who wish to study abroad. In 2003, the administration of Qatar University embarked on a mission to reform the academic and institutional structures of the university and to strengthen key governance and management operations, such as external oversight, academic governance, and management. The reforms under way in Qatar University focus on decentralization of the university's administrative and academic structures to encourage organizational autonomy and make practices more transparent.³⁴²

Qatar University provides free tuition for Qatari students and students from the other GCC countries who meet the entrance requirements and maintain a 2.0 grade point average. The University also offers scholarships to students from Arab and Islamic countries. Since the 1970s, Qatar has had a scholarship system designed to send male

³⁴⁰ Mary Ann Zehr, "Consultants Help Transform Arab Schools; Persian Gulf States Enlist Foreign Education Experts in Cautious Move Toward Western Methods," *Education Week* Vol. 27, Iss. 29 (March 26, 2008): 1.

³⁴¹ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 46.

³⁴² Ibid., 69.

students abroad for undergraduate and graduate programs not available locally.³⁴³ Qatar University enrolls the vast majority (91 percent) of students attending four-year institutions. Seventy-one percent of all students enrolled in four-year institutions are Qataris, and less than one-quarter (23 percent) of Qatari students are male. Qatar University has the highest Qatari/non-Qatari student ratio (74 percent), and Weill Cornell Medical College has the lowest (20 percent).³⁴⁴ In 2007, Qatar had 1,492 nationals studying abroad—including United Kingdom (599), U.S.A. (303), Australia (167), Jordan (140), Canada (75)—and 2,487 students from abroad studying in Qatar.³⁴⁵

Most post-secondary education and training offerings are open to both men and women. The exceptions are a few areas within the sciences at Qatar University that have formal gender restrictions making them open either only to men or only to women, but these are not in high-demand fields. Specifically, Bachelor of Science degrees in geology, agricultural science, and the double major of geography and urban planning are open only to men at Qatar University, whereas degrees in biomedical science and in food science and nutrition are granted only to women. These differences are likely related to employment opportunities that traditionally have been open solely to men and solely to women in Qatar. Degrees in areas of importance to employers—such as engineering, computer science, and business—are granted to both men and women.³⁴⁶

F. NATIONAL STUDENT ASSESSMENTS

Qatar is one of the first countries in the Arab world to institute comprehensive national student assessments to determine how students are performing against educational standards in specific grades and subjects. These exams—known as the Qatar Comprehensive Educational Assessment (QCEA)—cover Arabic language, English as a foreign language, science, and mathematics. The results of the first administration of the exams, in April 2004, were benchmarked to international standards. These data indicate

³⁴³ Stasz, *Postsecondary Education in Qatar : Employer Demand, Student Choice, and Options for Policy*, 66.

³⁴⁴ Ibid., 67.

³⁴⁵ Motivans, *Global Education Digest 2009*, Table 10, 42.

³⁴⁶ Stasz, *Postsecondary Education in Qatar: Employer Demand, Student Choice, and Options for Policy*, 84.

that students are not graduating from secondary school with a knowledge base consistent with international standards. Specifically, students in grades eleven and twelve on average correctly answered only thirty-five percent of the mathematics questions and approximately forty percent of the science and the English questions.³⁴⁷

G. UNIVERSITY STUDENT ENROLLMENT

According to employers in the private sector, there are not enough Qatari science and engineering graduates of Qatar University to fill Qatar's labor market needs. Most Qatari students graduated with a degree not in mathematics, science, engineering, or technology, but in humanities or social sciences. Out of 1,330 degrees awarded in 2002, just 281 were in the sciences and engineering fields. Males and females are receiving science and engineering degrees at the same rate even though females are more than twice as likely to receive a university degree.³⁴⁸

Qatari males are not pursuing advanced degrees and are opting to enter the labor force after completing their secondary education. Sixty-eight percent of Qatari males do not have a post-secondary education. A large attraction for Qatari males is employment by the government or with the police or military force, where a post-secondary degree is not required. In contrast, over seventy percent of Qatari females in the workforce have at least some post-secondary education, with sixty-five percent overall having a bachelor's degree.³⁴⁹ Current levels of education by gender in Qatar show a 30.7 percent overall secondary completion rate (48.0 percent male, 20.8 percent female), 11.1 percent overall completion rate for a post-secondary diploma (16.0 percent male, 8.3 percent female), 56.0 percent overall completion rate for a bachelor's degree (30.0 percent male, 70.8 percent female) and a 0.7 percent overall completion rate for advanced studies (4.0 percent male, 0.0 percent female).³⁵⁰

³⁴⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 58.

³⁴⁸ Ibid., 60.

³⁴⁹ Ibid., 61.

³⁵⁰ Martorell, "A Survey of Recent Qatari Secondary School Graduates," 15.

According to the 2007 survey of recent Qatari post-secondary and university graduates, male and females in post-secondary institutions had equal enrollments in business administration (11.45 percent male, 12.8 percent female) and compatible enrollments in social sciences (8.6 percent male, 5.1 percent female), but sharp discrepancies occur with education (0 percent male, 20.5 percent female), engineering (20 percent male, 0 percent female) and humanities, arts and literature (0 percent male, 25.6 percent female).³⁵¹ Females enjoyed a much higher completion rate at their first post-secondary schools (85.4 percent female completion, 57.9 percent male rate). One hundred percent of females attended school in Qatar while only 67.6 percent of males stayed home with 32.4 percent studying abroad.³⁵² Tertiary enrollment as a whole in 2007 was eleven percent of eligible age cohort but females made up thirty-one percent of their age cohort while males only amounted to five percent.

Public expenditure on education as a percent of GDP was 3.3 percent but amounted to 19.6 percent of total government expenditures. Qatar is devoting 2.8 percent of its GDP to scientific research, with the recently established Qatar National Research Fund administering more than \$25 million in research grants for 2008 through 2011.³⁵³ Literacy rates for adults (15+) were 93.1 percent and literacy rates for youth (15-24) reached 99.1 percent.³⁵⁴

H. HER HIGHNESS SHEIKHA MOZAH BINT NASSER AL MISSNED

Her Highness Sheikha Mozah Bint Nasser Al Missned, the Emir's second wife, has played a prominent role in Qatar's aim to become a regional education hub. She is the Chairperson of the Qatar Foundation for Education, Science, and Community Development, which she founded in 1995. Her Highness serves as President of the Supreme Council for Family Affairs, a government institution with the aim of strengthening the role of the family in society, and is Vice Chair of the Supreme

³⁵¹ Martorell, "A Survey of Recent Qatari Secondary School Graduates," 17.

³⁵² Ibid.

³⁵³ Krieger, "Desert Bloom," 26.

³⁵⁴ UNESCO, *UIS STATISTICS IN BRIEF QATAR 2009*, <http://www.uis.unesco.org> (accessed December 14, 2009).

Education Council that oversees the on-going comprehensive reform of Qatar's K-12 education system. In addition, she is Chairperson of the Sidra Medical and Research Center project, which aims to build a premier academic medical center in Qatar; Chairperson of the Silatech initiative to address the growing challenge of youth employment in the Middle East and North Africa (MENA) region; and Chairperson of the Arab Democracy Foundation based in Doha. In 2007, Forbes magazine named Her Highness one of the 100 most powerful women in the world, and The Times of London named her one of the twenty-five most influential business leaders in the Middle East. Her Highness graduated from Qatar University in 1986 with a degree in sociology and has been awarded honorary doctorates from Virginia Commonwealth University, Texas A&M University, Carnegie Mellon University, Imperial College London, and Georgetown University's School of Foreign Service.

In a speech given at the Brookings Institute in 2005, Sheikha Mozah succinctly described the challenges facing Qatar and future strategies to be utilized:

Human rights organizations urgently remind us that the democracy deficit is an international problem. It has become clear that without democratic channels of participation, citizens may turn to radical or even violent means of having their voices heard. Deficits in education are evident internationally in both developed and developing countries...In Qatar, we started realizing alliances are not static and that unless we are strong and independent, we can never gain security and stability in such a troubled world. We realized that the means to our security lies in enhancing our human resources, so we looked to our people to build a strong competitive society ready to participate in the global market. Freedom of speech, academic freedom, the right of citizens to establish civil and professional associations, and the right to assemble are protected under the Constitution. Freedom of the press is guaranteed, and this was demonstrated in the abolishment of the Ministry of Information and the establishment of al-Jazeera. The freedom to practice religious rights has also been assured, and Qatar has granted designated lots of land to non-Muslims for building places of worship. One of the most important rights guaranteed and protected in our Constitution is the right to education, and, again, I affirm that quality education is a right of every citizen...We teach children to memorize things. We teach children to know things by heart. We don't teach them to think and to analyze the facts. We don't create debate in classrooms. We don't create this sort of stimulation to the brain and the heart of people. And this is against Islam...We don't want this.

That's why in Qatar we started to change this fast, to create critical thinking, to encourage critical thinking and to encourage fact analysis in the classrooms....”³⁵⁵

I. THE QATAR FOUNDATION

Founded by decree of His Highness Sheikh Hamad Bin Khalifa Al Thani, Emir of the State of Qatar in 1995 and chaired by Her Highness Sheikha Mozah Bint Nasser Al Missned, The Qatar Foundation is a multibillion dollar endowment that focuses on education, scientific research and community development. The mission of the Qatar Foundation includes preparing young people in Qatar and the region to face the challenges of an ever-changing world. The Qatar Foundation supports non-Qataris, forgiving tuition loans to those who stay to work in Qatar after getting their degree.³⁵⁶ The Foundation aims to advance the State of Qatar to the point at which it can assume a leading role in educating for innovation and scientific research. The Foundation works on three axes: education, sciences and research, and society.³⁵⁷

The Foundations' flagship project is Education City, which includes not only western universities but also Qatar Academy, which is a K-12 school that offers internationally accepted and comprehensive academic programs, and The Academic Bridge Program (ABP) which is a post-secondary school program that helps students transition from high school to university.³⁵⁸ To modernize tertiary education and turn Qatar into a regional center for knowledge production, the government expects to spend \$5 billion from 2005-2010 on the establishment of western colleges on the outskirts of Doha.³⁵⁹ To encourage research, Qatar Science and Technology Park (QSTP) was

³⁵⁵ Sheikha Mouza, “HH Sheikha Mozah Bint Nasr al-Misnad” (speech prepared by HH Sheikha Mozah Bint Nasr al-Misnad of Qatar for the Brookings Institute, New York, September 29, 2004), <http://www.brookings.edu/fp/saban/events/sheikhhamozah20040929.pdf> (accessed January 18, 2010).

³⁵⁶ Tamar Levin, “Global Classrooms: Destination Qatar,” *New York Times*, February 11, 2008, http://www.nytimes.com/2008/02/11/education/11global.html?pagewanted=2&_r=2&ref=todayspaper (accessed November 11, 2009).

³⁵⁷ The Qatar Foundation, <http://www.qf.edu.qa/output/page40.asp> (accessed November 10, 2009).

³⁵⁸ Ibid.

³⁵⁹ The Qatar Foundation, <http://www.qf.edu.qa> (accessed November 10, 2009).

inaugurated in March 2009 and it is Qatar's first free trade zone. Over \$300 million has been invested in QTSP and tenants include ExxonMobil, Shell, Total, Rolls-Royce, EADS and Microsoft.³⁶⁰

J. EDUCATION CITY

Education City, on the outskirts of Doha, Qatar, is a 2,500 acre campus where nearly fifty nationalities are represented and is the largest enclave of American universities overseas.³⁶¹ Education City was officially inaugurated in 2003, but the first campus opened in 1998.³⁶² The Qatar Foundation invited world-class universities to operate campuses in Qatar. Admission standards, degree requirements and curriculum at the Education City schools are the same as at the American home campuses. In 1998, Virginia Commonwealth University School of the Arts opened its design school with enrollment limited to females. Weill Cornell Medical College began offering its medical programs in 2002. Texas A&M University followed in 2003, offering undergraduate degree programs in petroleum, chemical, electrical, and mechanical engineering. In 2007, Texas A&M began to offer a master's of engineering and a master's of science degree. Carnegie Mellon University began classes in 2004, bringing to Doha its programs in computer science and business and added Information Technology in 2008. Georgetown University started its Foreign Service programs in 2005. Northwestern University began teaching its programs in journalism and communication in the fall of 2008, becoming the latest branch campus to join Education City. Universities have complete control over their annually submitted budget, while all of their costs, including construction and salaries, are shouldered by the foundation.³⁶³ The government pays full tuition for all Qatari students, who make up about half of the enrollment.

Also part of Education City, the Islamic Studies College launched a general diploma program in Islamic Studies in 2007 and in February 2008 initiated a master's

³⁶⁰The Qatar Foundation, <http://www.qf.edu.qa> (accessed November 10, 2009).

³⁶¹ Levin, "Global Classrooms: Destination Qatar," 1.

³⁶² Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 70

³⁶³ Krieger, "Desert Bloom," 27.

degree program in current jurisprudence and public policy. The college is considered to be a regional center for thought and Islamic dialogue with a view to enhancing research related to Islamic culture. The college adopted English and Arabic as mediums of instruction in all its programs. The college contributes to implementing the mission of Qatar Foundation by providing education, conducting research, and ensuring the sustainability of the important aspects of the country's culture by highlighting the current role of Islam.³⁶⁴

Outside of Education City, CHN University Netherlands, which has operated in Doha since 2000, offers bachelor's degrees in hospitality management and tourism management. The College of the North Atlantic–Qatar, a Canadian institution, opened in 2002 and offers various two- and three-year diploma and certificate programs in engineering, business, health sciences, IT, and related fields designed for industrial, commercial, and government organizations. A majority of students attending this institution are sponsored by employers.³⁶⁵ As of academic year 2007–2008, there were a total of 1,124 students at Education City with fifty-one percent Qatari and forty-nine percent international. The gender breakdown of the students is sixty percent female and forty percent male. The international students studying at Education City come from a wide range of countries to include the U.S., U.K., Australia, France, Lebanon, Syria, Jordan, Palestine, Egypt, India, Iran, Turkey and Korea.³⁶⁶

Weill Cornell Medical College in Qatar (WCMC-Q) was established in 2001 in a partnership between Cornell University and Qatar Foundation. It is part of Weill Cornell Medical College in New York City. Pre-medical teaching began in Doha in 2002. The Medical Program opened in 2004; the inaugural class graduated in 2008. The biomedical research program was launched the same year and WCMC-Q's innovative six-year program of studies leads to the Cornell University M.D. degree based on the same standards as those of Weill Cornell in New York. The two-year Pre-medical Program of

³⁶⁴ The Qatar Foundation, <http://english.mofa.gov.qa/details.cfm?id=102> (accessed November 10, 2009).

³⁶⁵ Stasz, *Postsecondary Education in Qatar: Employer Demand, Student Choice, and Options for Policy*, 66.

³⁶⁶ The Qatar Foundation, <http://www.qf.org.qa/output/page31.asp> (accessed November 21, 2009).

Cornell course is followed by the four-year Medical Program that replicates the Weill Cornell curriculum. There are separate admissions processes for each program. Enrollment has grown rapidly from twenty-five students in 2002 to 262 in 2009. The WCMC-Q student body is widely diverse, representing more than thirty-six countries on five continents.³⁶⁷

The research division at Qatar Foundation was established to evolve a scientific community in Qatar and construction began in 2008 on the Sidra Medical and Research Center, a new specialty teaching hospital endowed with \$7.9 billion. Sidra will encompass clinical care, medical education and biomedical research. Partnered with WCMC-Q, Sidra will form an academic medical center of excellence, home to top-quality health care and research.³⁶⁸

At Weil Cornell, administrators must recruit eighteen principal researchers and about 100 postdoctoral students and technicians to staff the laboratories of its ambitious biomedical-research program. Over the next five years, the school must hire 200 clinicians and fifty researchers for the Sidra Medical and Research Center.³⁶⁹ That task will be much easier as Weill Cornell Medical College has been promised \$750-million over eleven years by the Qatar Foundation.³⁷⁰ Charles E. Thorpe, Dean of Carnegie Mellon University in Qatar, discussed the fiscal arrangement between his school and the Qatar Foundation: "We collect tuition and turn it over to the Qatar Foundation. They pay our operating costs...Carnegie Mellon employs forty-seven faculty members for just 183 students and it would be cheaper to pack all 183 students off to Carnegie Mellon's campus in Pittsburgh."³⁷¹

Education City represents broad opportunities for women, in a nation where many families do not allow their daughters to travel overseas for higher education or to mix

³⁶⁷ Weill Cornell Medical College in Qatar, <http://qatar-weill.cornell.edu/> (accessed November 21, 2009).

³⁶⁸ Ibid.

³⁶⁹ Andrew Mills, "Academics in the Persian Gulf," *The Chronicle of Higher Education* Vol. 55 Iss. 24 (Feb 20, 2009): 7.

³⁷⁰ Zvika Krieger, "Desert Bloom," 26.

³⁷¹ Andrew Mills, "Failure of George Mason U.'s Persian Gulf Campus Sparks Concern," 26.

casually with men. Cornell was Qatar's first coeducational institution of higher learning. Women can vote and drive in Qatar, but local customs dictate that Qatari women not mix casually with men who are not relatives. In a country where most schools are segregated by sex, Education City offers the chance for women to compete side by side with men.³⁷² Many Qatari women would not be allowed to attend universities in the states without a chaperone. Having an American university in their backyard solves the problem. Qatari students can visit the prayer room during the day and go home to their parents' house in Doha at night. Qatars are able to maintain a traditional lifestyle, while at the same time reaping the benefits of an American education. While classes in Education City are co-ed, dorm life is not. Women are not allowed to visit men in their dorm rooms.

K. THE ACADEMIC BRIDGE PROGRAM

The Academic Bridge Program (ABP) is a post-secondary school program that helps students in the transition from high school to university. The ABP's mission is to provide top graduates of high schools in Qatar and elsewhere in the region with the academic and personal skills needed for success in high-quality English-language university programs, particularly the universities in Qatar Foundation's Education City. Many of the students who have completed the Program in previous years are currently enrolled in these universities. All instruction is in English.³⁷³

The ABP is a nine-month coeducational program, with boarding facilities for some international students. The ABP admits Qatari high school graduates of good academic ability (scored in the top 20 percent of Qatari high school graduates) with English proficiency (TOEFL scores of 420 and above). The program offers about 200 students annually the opportunity to experience a coeducational learning environment in a well equipped facility with an international faculty of almost forty teachers and about twenty support staff. Nearly all teachers have masters' degrees, most have between ten to twenty years of experience, and many have had experience teaching in other international

³⁷² David Brancaccio, "Education City," *NOW* video transcript (week of 5-16-08), 8 <http://www.pbs.org/now/shows/420/index.html> (accessed November 6, 2009).

³⁷³ The Academic Bridge Program, <http://www.abp.edu.qa/output/page3.asp> (accessed November 29, 2009).

schools.³⁷⁴ Among the subjects included in the curriculum are English, science, mathematics, computers and multi-media skills. The courses also help students develop the computer skills and study habits that will ensure their success once they are enrolled at university.³⁷⁵

Dr. John C. Davis, who was the Director of the ABP from July 2002 until June 2004, commented on his experiences with the program:

The program was launched one week before the September 11, 2001 attacks on the United States. The goal of providing an additional year of post high school education to better prepare students for selective universities was a key component of Qatar Foundation's vision for the future of higher education in Qatar. It was prompted by the recognition that many very able Qatari students who studied abroad encountered academic difficulty because of their limited English language skills and their inadequate study skills. Prior to the 9/11 attack, most Qatari students who planned to study abroad expressed an interest in U.S. universities. However, the 9/11 attacks made visa acquisition by Arabs, especially young Arab men, much more difficult. As a result, many ABP students began to explore opportunities in the UK, Australia and Ireland. ABP students were overwhelmingly Qatari, though there were a handful of students from abroad (Sudan, Egypt, Saudi Arabia and Bosnia.) Only a few students had to pay tuition, as scholarships were given to all Qatari students by either Qatar Gas or the Qatar Ministry of Education. Qatar Gas scholarships for aspiring engineering students required monthly work experience with the company and obligated students to work for Qatar Gas upon completion of their studies. These students also received monthly stipends and all were planning for studies in petroleum-related engineering fields. Initially students were expected to have a TOEFL score of 500, but this standard was reduced to 400 due to lower English proficiencies. In the first year, students averaged 100 point gains on the TOEFL, which was seen as the equivalent of a one-year study experience in an English speaking country. For almost all the Qatari students, the ABP was the first co-educational experience they had since kindergarten, after which students were separated by gender in Qatari schools. The greatest weakness I witnessed with the Qatari students was their lack of problem-solving skills due to an overemphasis on rote memorization in Qatari schools. Study discipline was also lacking. Heavy emphasis was thus put

³⁷⁴ The Academic Bridge Program, <http://www.abp.edu.qa/output/page3.asp> (accessed November 29, 2009).

³⁷⁵ Ibid.

on improving students' time management skills and study skills. The success of the program was demonstrated by TOEFL score gains and test results in academic areas. Almost all students completed the program.³⁷⁶

³⁷⁶ Phone Interview, April 28, 2010. Dr. Davis was also President of NEASC from 1992 until 1993 and Director of the Saudi Arabian International School in Riyadh (SAIS-R) from 1993–2000.

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VII. THE UNITED ARAB EMIRATES

A. HISTORY

The United Arab Emirates is located between twenty-two and twenty-six degrees north latitude and fifty-one and fifty-six degrees east longitude. The country occupies a total area of 32,400 square miles and has 700 km of coastline, 600 km along the Arabian Gulf and 100 km bordering the Gulf of Oman. The coastline of the United Arab Emirates (UAE) has been transformed from a mosquito-infested backwater into a model of unrestrained capitalism. Easily seen from the stratosphere, the projects marketed as Palm Jebel Ali, The Palm Jumeirah, The Universe, The World and Palm Deira are considered to be the most audacious and expensive construction projects ever realized. The World development is comprised of 300 man-made islands four kilometers off the coast of Dubai. The 27 km breakwater surrounding the islands alone required thirty-four million tons of rock³⁷⁷. The Burj Dubai (subsequently renamed Burj Khalifa in appreciation of financial assistance from Abu Dhabi in 2010), costing a mere \$4.1 billion dollars, reached its final height of 2,648 feet on January 17, 2009, and was ready for occupancy in September 2009. It is the tallest man-made structure ever built. Yet up until the late twentieth century, the United Arab Emirates gained notoriety for piracy off its shores and for being one the most ungovernable and depressed areas of the Arabian Gulf.

Following the defeat of the Qawasim, a local maritime power, in 1820, the British signed a series of agreements with the sheikhs of the individual emirates that, later augmented with treaties on preserving a maritime truce, resulted in the area becoming known as “The Trucial States”. The most important of these series of treaties and agreements culminated in 1892, when the rulers of the emirates pledged to deal exclusively with the British on all matters related to economic and foreign. The British maintained a very laissez-faire policy with trucial domestic issues. In 1926, responding to

³⁷⁷ The Dubai World Development, <http://www.theworld.ae> (accessed November, 15, 2009)

the personal request of Saqr Bin Zayid of Abu Dhabi for personal protection from potential rivals he saw in his dead brother's sons, the political resident of Bushire, Sir Lionel Haworth stated:

The system of policing the sea and leaving the land to look after itself has been carried on successfully during the last half century. If a sheik murdered his brother it affected us not at all. As long as he held power, we recognized him and shook his hand. When he in turn was murdered by another brother we greeted the new power with equal readiness. It was none of our business and the sheiks were as anxious to keep us out of their lands as we were anxious to avoid being drawn into their quarrels on shore.³⁷⁸

This arrangement remained in place until 1971, when the British withdrew military commitments from the region and the UAE federation was established.³⁷⁹ The pearl industry thrived in the relative calm at sea during the nineteenth and early twentieth centuries, providing both income and employment to the people of the Arabian Gulf coast. The First World War severely impacted the pearl fishery, but it was the economic depression of the late 1920s and early 1930s, coupled with the Japanese invention of the cultured pearl, that damaged it irreparably. The industry eventually faded away shortly after the Second World War.

At the beginning of the 1930s, the first oil company teams carried out preliminary surveys and the first cargo of crude was exported from Abu Dhabi in 1962. Dubai's oil exports commenced in 1969. Sheikh Zayed, founder of the modern UAE, died in November 2004, being succeeded as the UAE's President and as Ruler of Abu Dhabi by his eldest son, HH Sheikh Khalifa Bin Zayed Al Nahyan. The principles and philosophy he brought to government, however, remain at the core of the state, and of its policies, today.³⁸⁰

At the beginning of 1968, when the British announced their intention of withdrawing from the Arabian Gulf by the end of 1971, Sheik Zayed, the ruler of Abu Dhabi since 1966, and Sheik Rashid, ruler of Dubai since 1939, moved quickly to call for

³⁷⁸ Said Zahlan, *The Origins of the United Arab Emirates* (New York: St Martin's Press, 1978), 67.

³⁷⁹ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 93.

³⁸⁰ Paula Vine ed., *United Arab Emirates Yearbook 2009* (London: Trident Press, 2009), 19.

a federation that would include not only the seven Emirates that together made up the Trucial States, but also Qatar and Bahrain. Following a period of negotiation, however, agreement was reached between the rulers of six Emirates (Abu Dhabi, Dubai, Sharjah, Umm al-Quwain, Fujairah and Ajman) and the federation to be known as the United Arab Emirates was formally established on December 2, 1971. The seventh Emirate, Ras al Khaimah, formally acceded to the new federation on February 10, 1972³⁸¹. Bahrain and Qatar declared their separate independence in 1971.

Administratively, the UAE is a loose constitutional federation of seven Emirates, each with its own ruler. The constitution established the positions of President (Chief of State), traditionally from Abu Dhabi, and Vice President, traditionally from Dubai. The Supreme Council, composed of the rulers of each Emirate, elect the President and Vice President to five year terms when it convenes at five-year intervals. Currently, Sheik Khalifa Bin Zayed Al Nahyan, ruler of Abu Dhabi, is President and Vice President and Prime Minister is Sheik Maktoum Bin Rashid Al Maktoum, ruler of Dubai. The Council of Ministers, headed by the Prime Minister, is the executive authority for the federation. The Federal National Council (FNC), comprising forty members with half appointed by the rulers and half elected from the separate Emirates, is primarily a consultative body. The FNC has both legislative and supervisory power. There is a federal judiciary composed of the Supreme Court and Courts of First Instance. Each of the Emirates has its own local government, the complexity of which differs according to size and population³⁸².

The UAE has continued to pursue aggressive privatization and diversification strategies by providing incentives to international companies to establish regional headquarters and branch offices in the country. International companies with the potential for growth have been invited to open branches in free zones. The Jebel Ali Free Zone, which was purported to house 6,000 companies as of the end of 2006 and which

³⁸¹ Embassy of the UAE, <http://uae-embassy.org/uae> (accessed November 19, 2009).

³⁸² Ibid.

represents a vast array of industries, has encouraged partnerships between local, regional, and international companies to take advantage of the infrastructure and basic services, along with the exemption from tax and labor laws.³⁸³

B. POPULATION

In the UAE, which comprises about 4.6 million persons, non-nationals comprise seventy-eight percent of the population and ninety-one percent of the labor force.³⁸⁴ The UAE has the highest proportion of expatriates of all the Gulf countries.³⁸⁵ Most expatriates were from other Arab or South Asian nations but recently there has been a steady influx of African, European, and North American migrants. Most expatriates are Palestinian, Egyptian, Jordanian, Yemeni and Omani – as well as many Indians, Pakistanis, Bangladeshis, Iranians, Afghans, Filipinos and western Europeans. The majority of UAE citizens are Sunni Muslims with a very small Shi'a minority. The population of the UAE grew in the period following the discovery of oil, going from an estimated 500,000 in 1975 to 4.6 million in 2006.³⁸⁶ Among the total UAE population, as of 2005, the largest share (79 percent) was age fifteen to sixty-four, and twenty percent was under age fifteen. Among nationals in that year, nearly thirty-eight percent were under age fifteen; among non-nationals, only fifteen percent were. Literacy rates are around ninety-five percent for the population as a whole.³⁸⁷ Just under three percent of Emiratis were above age sixty-four, compared with less than one percent of non-nationals. Very few, if any, non-nationals spend their retirement years in the UAE. This is true of non-nationals in Qatar, as well, because employment contracts typically are not renewed as non-nationals near or reach retirement, and most of them return to their home country.³⁸⁸

³⁸³ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 138.

³⁸⁴ Ibid., 27.

³⁸⁵ Ibid., 99.

³⁸⁶ Ibid., 95.

³⁸⁷ UIS, *UAE Statistics in Brief 2009* (New York: UNESCO, 2009), 1.

³⁸⁸ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 97.

An important factor contributing to the exploding demand for higher education is the growing population of children of the enormous expatriate communities living long-term in the GCC. In Saudi Arabia and Kuwait, expatriates make up over half of the population; in Qatar and the United Arab Emirates, noncitizens make up close to eighty percent of their populations. Once considered temporary guest-workers, these groups have gradually become more entrenched and have raised families in country. The first waves of thousands of their children coming out of secondary schools are now seeking university places in their Gulf homes. As they have usually been excluded from public universities as noncitizens, the private sector is their only option.³⁸⁹

C. NATURAL RESOURCES

The UAE has undergone substantial economic growth over a relatively short period. The country's GDP rose dramatically over the course of just thirty years. After faltering in the mid-1980s, GDP growth recovered and has remained steady since the late 1980s. From 1993 to 2005, GDP more than doubled in real terms, going from \$47 billion to \$104 billion in 2000 U.S. dollars. In 2008, GDP had reached \$260.1 billion with a per capita GDP of \$54,606.³⁹⁰ Petroleum and gas make up \$200 billion of exports destined primarily to markets in Japan, South Korea, Thailand and India.³⁹¹ The 2008 UN Human Development Index ranks the UAE at thirty-ninth place out of 177 countries, and at twenty-eighth the UAE earned the highest ranking of all Arab states in the 2008 Legatum Prosperity Index, which measures not just wealth but also well-being in terms of happiness, health and fulfillment in over 100 countries worldwide.³⁹²

This growth stems in large part from the production and sale of oil. Oil reserves are estimated at 98 billion barrels and will last approximately 100 years at current production levels. Approximately ninety-four percent of the UAE's oil reserves are in the emirate of Abu Dhabi. The remaining oil reserves are in Dubai (4.0 percent), Sharjah (1.5

³⁸⁹ Ugo Fasano and Zubair Iqbal, "GCC Countries: From Oil Dependence to Diversification," 3.

³⁹⁰ M. Niqbah ed., *The Global Competitiveness Report 2009-2010* (UAE: World Economic Forum, 2009), 316.

³⁹¹ U.S. State Department, <http://www.state.gov> (accessed November 21, 2009).

³⁹² Vine, *United Arab Emirates Yearbook 2009*, 205.

percent), Ra's al Khaymah (0.1 percent), and shared among the other three emirates, Ajman, Umm al Qawayn, and Al Fujayrah. Over ninety percent of the UAE's gas reserves are owned by Abu Dhabi, as well, with the remaining reserves in Sharjah (5 percent), Dubai (2 percent), and Ra's al Khaymah (0.6 percent). Consequently, the greatest economic growth has occurred mainly in Abu Dhabi, Dubai, and Sharjah.³⁹³ The UAE's oil production is 2.378 million bbl/day, and its natural gas production is 46.6 billion cubic meters per year, with 6 trillion cubic meters of proven reserves. In 2004, oil and gas production alone accounted for a large portion (30 percent) of the UAE's GDP, giving Abu Dhabi the strongest economy in the country. Yet the growing manufacturing and construction sectors in emirates such as Dubai are beginning to account for significant shares of economic activity (14 percent and 8 percent, respectively).³⁹⁴

D. EMPLOYMENT

"Emiratization" is the broad term used to describe a set of policies and laws that involve increasing the share of Emirati citizens employed in a particular sector. These policies are intended not just to reduce the overall reliance on foreign imported labor in absolute terms, but also to increase the share of jobs held by nationals in crucial and high-growth-potential sectors, such as oil and gas production, banking, insurance, trade, and, more recently, tourism.³⁹⁵ Despite efforts to increase the share of nationals in the labor force, little has changed in the last decade. Only eight percent of the 2005 workforce in the UAE was Emirati, which is very similar to the percentage in 1995. Approximately sixty-nine percent of Emirati males participated in the labor force in 2005, compared with nineteen percent of Emirati females. In other words, only one of every five Emirati working-age females is in the labor force, despite their high levels of educational attainment.³⁹⁶

³⁹³ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 95.

³⁹⁴ Ibid., 19

³⁹⁵ Ibid., 131.

³⁹⁶ Ibid., 108.

E. UNIVERSITY GRADUATES

Emirati graduates in the arts outnumbered those in the sciences by 1.4 to 1.0 as of academic year 2005–2006. Emiratis made up seventy-seven percent of the graduates majoring in the arts and just forty-nine percent of graduates majoring in the sciences.³⁹⁷ Continued undersupply of new Emirati workforce entrants with technical or business backgrounds, especially in an economy heavily dependent on oil, gas, information technology, and financial services, will further lead employers to look to hire foreign workers with the required skills.³⁹⁸ There also exists a cultural bias against technical and manual work. These biases find their way into the educational system and lead to qualified people with technical skills working in the government and in other white-collar occupations. The deficient educational system leads to a serious skills mismatch, since it hinders the employability of the native population in the private sector and hence is biased towards public sector occupations.³⁹⁹

F. FEMALE STUDENTS

Women in the emirates have been able to pursue higher education since 1977, when United Arab Emirates University was founded. But many students say the curriculum at the university—which has separate facilities for women, and women-only hours at shared facilities like the campus library—is too rigid and traditional. And the campus, which is in the city of Al Ain, is a painfully long commute—up to two and a half hours, depending on traffic—for students whose homes are in Abu Dhabi or Dubai. Abu Dhabi Women's College, for example, was founded in 1988. According to the college's administrators, after the members of the first graduating class received their degrees in 1991, only about eight percent headed into the work force. Now, fifteen years later, the

³⁹⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 113.

³⁹⁸ Ibid., 115.

³⁹⁹ Joan Myusken and Samia Nour, “Deficiencies in Education and Poor Prospects for Economic Growth in the Gulf Countries: The Case of the UAE” *Journal of Development Studies* Vol. 42 No. 6 (August 2006): 965.

figure is close to eighty percent.⁴⁰⁰ In 1977, female students made up 37.6 percent of the students in the Emirates. Of the 2,640 Emirati graduates of UAE University in academic year 2001–2002, eighty-five percent were females. Of the Emirati graduates from the private and local, or emirate-based, institutions, sixty-four percent were females.⁴⁰¹ By 2002, Young women made up forty-four percent of Emirati students studying abroad. This indicates that families are placing greater trust in young women's judgment, and it signals a significant shift in public opinion. Evidently, families perceive that the gains young women make from higher education and study abroad outweigh earlier considerations, such as the risk to a young woman's reputation caused by an unchaperoned stay abroad. This is a major shift reflecting the dynamism of the Arabian Gulf States.⁴⁰²

Having excelled in educational attainments, women in the UAE account for 27.95 percent of the national labor force, marking an annual growth rate of 3.5 percent between 1985 and 2005. Women occupy sixty-six percent of public-sector jobs, thirty percent of which are leadership and decision-making posts. UAE women have also joined the police, military and air force (the first four female women pilots to serve in the UAE air force graduated from Khalifa Aviation College in January 2008).⁴⁰³ Women are also represented in the legislative, executive and judiciary: the new Cabinet, appointed in late 2007, includes four women ministers, and women occupy twenty-two percent of the seats in the Federal National Council. Women constitute twenty percent of the diplomatic corps and two women were appointed as ambassadors in 2008. In addition, the law

⁴⁰⁰ Katherine Zoepf, "Universities for Women Push Borders in Persian Gulf," *The Chronicle of Higher Education* Vol. 52, Iss. 32 (Apr 14, 2006): 45.

⁴⁰¹ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 103.

⁴⁰² Caren Nelson, "UAE National Women at Work in the Private Sector, Conditions and Constraints," *Center for Labor Market Research and Information, United Arab Emirates Ministry of Information and Culture, Dubai* (2005), <http://www.zu.ac.ae/infoasis/modules/mod8/Business/documents/UAEnationalwomenatworkintheprivatesector.pdf> (accessed November 15, 2009).

⁴⁰³ Vine, *United Arab Emirates Yearbook 2009*, 236.

governing judicial appointments was amended in 2008 to permit women judges to be appointed in the UAE and the first female judge was appointed in Abu Dhabi in 2008.⁴⁰⁴

G. PUBLIC EDUCATION

The UAE's education system began in much the same way as those of the other Gulf nations, with children studying together on the grounds of the village mosque, reciting passages of the Quran while typically guided by individuals versed in the sacred text.⁴⁰⁵ Until the 1950s, the only educational institution available to either boys or girls was the *kuttab*, where children learned the Quran by heart and also studied some arithmetic.⁴⁰⁶ Formal education started to take shape between 1907 and 1953, when prominent pearl traders began establishing private schools in their local towns. Private schools remain popular, with a large portion of Emirati students enrolled in private schools in the early grades. In 2005–2006, the combined share of males and females enrolled in kindergarten was about equal in government and private schools, with about forty-seven percent of students overall enrolled in private schools.⁴⁰⁷ The oldest school in the UAE was opened in Sharjah in 1907, followed by a school in Dubai in 1912. The UAE's modern version of government schools began in academic year 1953–1954 with the opening of Al Qasimiyah School in Sharjah with teachers from Kuwait.⁴⁰⁸

In 1971, after the formation of the federation, the Ministry of Education and Youth was established in Al Ain, Abu Dhabi Emirate. UAE University became the first major post-secondary institution to open its doors in the country, offering a liberal arts and sciences program in literature, sciences, education, and political science, and business administration. Currently, UAE University enrolls an entering class comprising ninety percent nationals and ten percent non-nationals and offers all of them free tuition

⁴⁰⁴ Vine, *United Arab Emirates Yearbook 2009*, 236.

⁴⁰⁵ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 100.

⁴⁰⁶ Nesta Ramazani, "Arab Women in the Gulf," *Middle East Journal* Vol. 39 No. 2 (Spring, 1985), 272.

⁴⁰⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 101.

⁴⁰⁸ Nesta Ramazani, "Arab Women in the Gulf," 272.

along with room and board. Emirati males only account for nineteen percent of the student body while Emirati females account for seventy-one percent.⁴⁰⁹ Another major government post-secondary institution is the Higher Colleges of Technology (HCT), which was established in 1988 and currently enrolls approximately 16,000 students across fifteen branch campuses throughout the UAE in separate facilities for males and females. HCT provides programs in technical fields as an alternative to the more liberal arts education offered at UAE University. The third government-funded post-secondary degree-granting institution, Zayed University, was established in 1998; it has campuses in Dubai and Abu Dhabi and admits only female students at this time. Al-Zayed University in Abu Dhabi is the only government school that has successfully implemented the American model of higher education and is accredited without being incorporated in the United States. Interestingly enough, the university has a control system for students, prohibiting them from leaving the university during operating hours. Parents demand this system to make sure their children are at the university and not elsewhere without supervision.⁴¹⁰ Unlike UAE University, which admits non-nationals, HCT and Zayed University admit only Emiratis. Together, the three federal-level higher education institutions—UAE University, Zayed University, and HCT—enroll the greatest share of nationals.⁴¹¹ With more than thirty universities and colleges, the three state institutions enroll more than 23,000 students, about sixty percent of the country's total student population.⁴¹² Ninety-five percent of all females and eighty percent of all males who are enrolled in the final year of secondary school apply for admission to higher education.⁴¹³

⁴⁰⁹ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 100.

⁴¹⁰ Shafeeq Ghabra and Margreet Arnold, "Studying the American Way: An Assessment of American-Style Higher Education in Arab Countries," p.11

⁴¹¹ Gonzalez, *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 100.

⁴¹² Sally Findlow, "Higher Education and Linguistic Dualism in the Arab Gulf," *British Journal of Sociology of Education* Vol. 27 No. 1(February 2006), 20.

⁴¹³ Vine ed., *United Arab Emirates Yearbook 2009*, 230.

H. THE ROLE OF EXPATRIATES IN HIGHER EDUCATION

The Ministry of Higher Education and Scientific Research, which oversees the public university system's \$400 million operating budget and sets its priorities, is dominated by western expatriates. These academics are working closely with government officials to fundamentally change the higher-education system in the country's seven emirates. The predominance of westerners in the universities is the work of the emirates' higher-education minister, Sheik Nahayan Mabarak Al Nahayan. Sheik Nahayan has made it imperative that every program offered in the public universities become internationally accredited. While there is no official policy to recruit western faculty members, insiders say they are clearly the favored choice over academics from the Middle East or Asia. In 2008, Wyatt Hume, a former provost of the University of California system, took over as provost at United Arab Emirates University, and Daniel M. Johnson, President Emeritus of the University of Toledo, became provost of Zayed University, which has branches in Dubai and Abu Dhabi. Arabic has been all but eliminated as the language of instruction in favor of the more universal English. Western-educated expatriate professors vastly outnumber their Emirati colleagues. The entire university system, from classroom instruction to institutional accreditation, is being overhauled to conform to American standards.⁴¹⁴

I. THE EMIRATE OF DUBAI

Dubai's plan, entitled "Dubai Strategic Plan 2015" is an ambitious project to increase the real per capita GDP, which takes into account inflation, of this Arab city-state from its current value of \$31,000 to \$44,000 in 2015, which would equate to a GDP of \$108 billion. The increase would require a sky-high eleven percent annual GDP growth rate. The non-oil sector now accounts for ninety-seven percent of the emirate's total GDP, which is a significant shift from 1975, when oil revenues made up sixty-four percent of the GDP. Dubai has also taken advantage of its location to become the biggest re-exporting center in the Middle East, accounting for about eighty-five percent of the

⁴¹⁴ Zehr, "Consultants Help Transform Arab Schools; Persian Gulf States Enlist Foreign Education Experts in Cautious Move Toward Western Methods," 1.

Emirates re-export trade.⁴¹⁵ This is in sharp contrast to the oil-rich Abu Dhabi Emirate, which produces more than eighty-five percent of all oil from the Emirates combined. The non-oil sector contributed only thirty-seven percent of Abu Dhabi's GDP in 2006.

In 2007, the ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum presented Dubai Strategic Plan 2015:

We must all realize that strategic success requires social development to complement and parallel economic development. Indeed experience confirms that having an effective social infrastructure is the key to reaching higher levels of sustained economic growth. Key aspects of Dubai Strategic Plan 2015 are as follows: 1. Preserve national identity: This will be achieved by revising policies and procedures to ensure demographic balance; increasing the sense of belonging and the awareness of local culture by updating educational curriculum and developing the abilities of national teaching resources; ensuring comprehensive cultural content through relevant activities and channels including media, arts and literature; and increasing focus on the Arabic language as it encompasses national history and culture; 2. Increase nationals' participation in the workforce and society: This will be achieved by developing national capital to become the preferred workforce in selected strategic sectors; providing nationals with the abilities necessary to cope with the rapid changes in society and increase their awareness of the role expected of them in the development of Dubai and its society; 3. Increase nationals' participation in the workforce and society: This will be achieved by developing national capital to become the preferred workforce in selected strategic sectors; providing nationals with the abilities necessary to cope with the rapid changes in society and increase their awareness of the role expected of them; 4. Elevate the quality of healthcare services and the well-being of the population; 5. Ensure that high quality social services are provided to meet the needs of nationals: This will be achieved by improving governance and efficiency of the social service sector; transforming service philosophy from a "welfare" approach to a "social development" approach; 6. Provide equality and acceptable working conditions for Dubai's workforce in order to attract and retain the required expertise: This will be achieved by coordinating with federal entities to improve and update labor laws and labor rights; 7. Promote cultural life in Dubai by upgrading the regulatory framework of the cultural sector; increasing awareness and interest in Dubai's cultural activities;

⁴¹⁵ James Calderwood, "Dubai Serves as Diversification Model" The Associated Press, February 4, 2007, <http://www.washingtonpost.com/wp-dyn/content/article/2007/02/04/AR2007020400702.html?nav=hcmodule> (accessed January 19, 2010)

encouraging and nurturing national talent; developing high-quality facilities, including theatres, movie houses and museums, to attract international art and cultural events....⁴¹⁶

Among the most important initiatives in support of knowledge and creativity has been the establishment in 2007 of the Mohammed bin Rashid Al Maktoum Foundation, a personal initiative of His Highness Sheikh Mohammed Bin Rashid Al Maktoum, who allocated the sum of \$10 billion as a knowledge endowment.⁴¹⁷ The Foundation has been tasked with empowering future generations to devise sustainable home-grown solutions to challenges faced by the Arab World. The Foundation will do this by spreading knowledge throughout the region, thereby fostering ideas and innovation.⁴¹⁸ The foundation focuses its work in three areas to include culture, entrepreneurship and employment, and knowledge and education. Specific goals include: developing and nurturing a generation of future leaders in government, the private sector and civil society; elevating research, knowledge creation and the infrastructure of higher education to international standards; stimulating employment and entrepreneurship and empowering young people to promote the status of culture, heritage and cross-cultural understanding in the region.⁴¹⁹

In the mid-1980s, the Middle East, which covers a territory stretching from North Africa to the Indian subcontinent, was losing almost thirty percent of its student population to the U.S. education market alone.⁴²⁰ Most of these students would remain permanently in that economy upon graduation. The consequence of this kind of brain drain has a devastating effect on a developing economy. As the region lost the brightest

⁴¹⁶ Mohammed bin Rashid Al Maktoum, (speech presented by UAE Vice President and Prime Minister and Ruler of Dubai His Highness Sheikh Mohammed bin Rashid Al Maktoum to introduce Dubai Strategic Plan 2015, Dubai, UAE, February 3, 2007), http://www.dubai.ae/en.portal?topic,hm_dxbstgplan,0,&_nfpb=true&_pageLabel=misc (accessed November 21, 2009).

⁴¹⁷ Mohammed bin Rashid Al Maktoum Foundation, <http://www.mbrfoundation.ae/English/Pages/AboutUs.aspx> (accessed November 22, 2009).

⁴¹⁸ Mohammed bin Rashid Al Maktoum Foundation, <http://www.mbrfoundation.ae/English/Pages/AboutUs.aspx> (accessed November 22, 2009).

⁴¹⁹ Ibid.

⁴²⁰ Thomas D. Snyder, *Digest of Education Statistics 2000* (New York: National Centre for Education Statistics, 2001), 51 <http://nces.ed.gov/pubsinfo.asp?pubid=2001034>. (accessed November 21, 2009).

and best to foreign markets, innovation and business development was hampered by a lack of technical expertise, leaving an economy struggling to mature and a stagnant employment market.⁴²¹

Dubai Academic City (DAC), a cluster of international academic institutes, training centers and learning support entities, was launched to address this issue by providing quality international higher education, regionally. In addition to tackling brain drain, DAC breaks the barriers faced by students of this region when attempting to access international education. These include rising international student tuition fees, tightening of immigration procedures in some education destinations, and the prevention of overseas study as a result of cultural concerns. In addition, the events of 9/11 in 2001, have meant that the U.S., once the region's most desirable study destination, has declined significantly in popularity.⁴²² Plans for Dubai Academic City (DAC) began in February 2002, and the knowledge cluster was inaugurated in October 2003, with six universities from four different countries and just over 2,500 students. A year later, DAC's academic community had grown 150 percent to fifteen universities from nine different countries, and its student population had grown 140 percent to over 6,000.⁴²³

Dubai Knowledge Village (DKV),⁴²⁴ launched in 2003 and located in the Dubai Academic City, is the world's only Free Zone dedicated to higher education. A regional base for premier international higher education institutions, DKV is the world's first dedicated tertiary cluster development. DKV is a member of TECOM Investments,⁴²⁵ which is a subsidiary of Dubai Holding and is dedicated to supporting the development of knowledge-based industries in Dubai. Spread across an area of 25 million square feet, the DKV campus provides an intellectually inspiring coeducational environment for students and faculty. There are currently thirty-two international universities of higher learning from diverse regions with representation from the U.S., Australia, India, Pakistan, Iran,

⁴²¹ Dubai International Academic City, <http://www.diacedu.ae/> (accessed November 22, 2009).

⁴²² Ibid.

⁴²³ Ibid.

⁴²⁴ Dubai Knowledge Village, <http://www.kv.ae/> (accessed November 22, 2009).

⁴²⁵ Dubai Holding Company, <http://dubaiholding.com/en/our-companies/tecom-investments/> (accessed November 22, 2009).

Russia, Belgium, UK and France catering to over 12,000 students. These include Michigan State University, The University of Wollongong from Australia, Middlesex University Dubai Campus from the U.K, and S.P Jain Centre of Management Dubai from India among others. These institutions offer programs that range in duration from one year to four years. Major academic programs include engineering, computer science, fashion and design, media studies, environmental studies, child development, quality management and business management. Benefits for DKV partners include 100 percent foreign ownership and 100 percent repatriation of tax-free profits. The university-based and more advanced degree programs in Knowledge Village will move to Dubai International Academic City (DIAC)⁴²⁶, a project costing 12 billion dirhams (\$3.3 billion) that is set for completion in 2012. Knowledge Village will focus on job training-based programs; Dubai International Academic City will host four-year academic institutions of higher learning. As in Knowledge Village, foreign institutions in Academic City will operate on a private basis, responsible for covering their expenses through tuition and fees.⁴²⁷

In 2007, Dubai reached agreement with Michigan State University, the first American university to open a campus in the emirate, on setting up a campus, which will be the anchor for the new Dubai International Academic City. Michigan State will also be the first nonprofit university in the country.⁴²⁸ Although it will have to pay for its own operations, it will benefit from a generous line of credit from Tecom Investments. The new complex for DIAC at DKV currently houses 3,500 students relocated from Knowledge Village, and officials hope to enroll more than 25,000 by 2012. Michigan State University Dubai offers bachelor's degree programs including computer engineering and construction project management. It is adding postgraduate degree programs, including a master of science in supply chain management. The decision to open operations in Dubai was contingent on several conditions: a requirement that the

⁴²⁶ Dubai International Academic City, <http://www.diacedu.ae/> (accessed November 22, 2009).

⁴²⁷ Gonzalez, *Facing Human Capital Challenges of the 21st Century: Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*, 129.

⁴²⁸ Zvika Krieger, "Dubai, Aiming to Be an Academic Hub, Strikes a Deal With Michigan State" *The Chronicle of Higher Education* Vol. 54 Iss. 8 (Oct 19, 2007): 33.

project be self-sustaining without the use of U.S. taxpayer money; not drain resources from the main campus in Michigan; and not utilize foreign investors to underwrite the campus.⁴²⁹ Also joining DIAC, Rochester Institute of Technology from New York is offering master's degree programs including electrical engineering, mechanical engineering, and networking and systems administration. These are currently offered as part-time study programs in evenings and on weekends. Undergraduate programs in engineering are expected to be offered starting in 2010.⁴³⁰

International Academic City is just one part of Dubai's long-term development plan. It will also place universities within industrial clusters to form symbiotic relationships. The cluster approach has drawn Harvard Medical International, a nonprofit arm of Harvard Medical School that creates partnerships around the world. Harvard will establish Harvard Medical School Dubai in Dubai Healthcare City, a \$1.8-billion complex, which will contain private hospitals and clinics, pharmaceutical companies, and research centers, as well as residential villas, apartments, and five-star hotels surrounding an artificial lake. Boston University is also establishing a dental program in Healthcare City.⁴³¹

J. THE EMIRATE OF ABU DHABI

Abu Dhabi, the capital of the United Arab Emirates, is estimated to be home to ten percent of the world's oil reserves, which is worth as much as \$3 trillion, has agreed to pay \$520 million just to use the name "Louvre" for thirty years and plans to pay \$747 million more for art loans and advice from the French institution. The new museum will be housed in a massive \$27 billion complex called Saadiyat Island, perhaps the most ambitious cultural-development project ever conceived. The 27-square-kilometer island, expected to open in phases beginning in 2012, will eventually include twenty-nine luxury hotels and a huge park with a 1.5 kilometer canal-side pavilion for a biennial arts festival modeled on those in Venice and Berlin. Plans also include branches of many of the

⁴²⁹ Karin Fischer, "How the Deal Was Done: Michigan State in Dubai", *The Chronicle of Higher Education* Vol. 55 Iss. 6 (March 28, 2008): 16.

⁴³⁰ Rochester Institute of Technology, <http://www.rit.edu> (accessed January 18, 2010).

⁴³¹ Krieger, "Desert Bloom," 28.

world's most illustrious museums and academies (to include the Guggenheim and Sorbonne), a maritime museum and a performing-arts center to be managed by the Lincoln Center.⁴³² Abu Dhabi also recently signed a \$2-billion deal with Warner Brothers to open a mega-studio to jump-start a nascent entertainment industry, dovetailing with the critically acclaimed Dubai International Film Festival.⁴³³

The Government of Abu Dhabi has published a long-term plan for the transformation of the Emirate's economy, including a reduced reliance on the oil sector as a source of economic activity over time and a greater focus on knowledge-based industries in the future. Entitled "The Abu Dhabi Economic Vision 2030", the document provides a comprehensive plan for the diversification of the Emirate's economy and a significant increase in the non-oil sector's contribution to the Emirate's GDP by the year 2030. Priorities include: "building an open, efficient, effective and globally integrated business environment; adopting a disciplined fiscal policy that is responsive to economic cycles; establishing a resilient monetary and financial market environment with manageable levels of inflation; driving significant improvement in the efficiency of the labor market; developing a sufficient and resilient infrastructure capable of supporting anticipated economic growth; developing a highly skilled, highly productive work force and enabling financial markets to become the key financiers of economic sectors and projects."⁴³⁴

New York University (NYU), which received \$50 million from the government up front, in addition to payment for construction and operating expenses, opened the New York University—Abu Dhabi (NYUAD) Institute in 2008, which offers conferences, lectures, and other cultural activities, as a precursor to the full campus that will be completed by 2012.⁴³⁵ NYU plans to establish an ambitious liberal arts campus and will

⁴³² Zvika Krieger, "Buying Culture; By Luring Western Institutions Like the Louvre and Yale, Abu Dhabi Aims to Become a Global Arts Center," *Newsweek* (Aug 6, 2007): 48

⁴³³ Krieger, "Desert Bloom," 28.

⁴³⁴ Abu Dhabi Council for Economic Development, *The Abu Dhabi Economic Vision 2030* (Dubai, UAE: ADCED, 2008), 5.

⁴³⁵ Marc Santora, "N.Y.U. Names the Leader of Its Abu Dhabi Campus," *New York Times*, September 30, 2008.

commerce studies in the fall of 2010.⁴³⁶ The NYU Abu Dhabi campus will offer the same degrees that are offered in New York, with a curriculum developed by the university's New York-based faculty. The university hopes eventually to enroll more than 2,000 undergraduates and several hundred graduate students on the new campus. Its students will be chosen by NYU's Office of Admissions, relying on the same standards used for the New York campus. NYU Abu Dhabi students will be offered the opportunity to spend a semester in New York and a semester at one of the university's twelve other outposts around the world, located in such places as China, Ghana, and England.⁴³⁷

NYU, The French business school INSEAD, Johns Hopkins University, Université Paris Sorbonne, MIT and the United Arab Emirates' Zayed University will anchor the new Abu Dhabi university City.⁴³⁸ MIT will recruit faculty members, train instructors, design curricula and train graduate students for the new Masdar Institute of Science and Technology that will be housed in Masdar City at the edge of Abu Dhabi, a \$22 million six-square-kilometer, zero-carbon, zero-waste "green community" that will be powered by a 500-megawatt solar power plant. The complex will also house up to 1,500 technology companies (tax-free and with full foreign ownership)—a model that may inspire the same sort of synergy that exists between Stanford and Silicon Valley.⁴³⁹

K. THE EMIRATE OF SHARJAH

American University of Sharjah (AUS) was founded in 1997 by His Highness Sheikh Dr. Sultan Bin Mohammad Al Qassimi, member of the Supreme Council of the United Arab Emirates and Ruler of Sharjah, who envisioned the university as a leading educational institution in the Gulf region.⁴⁴⁰ AUS is an independent, not-for-profit coeducational institution. Although based on American institutions of higher education,

⁴³⁶ Mills, "Failure of George Mason U.'s Persian Gulf Campus Sparks Concern," 26.

⁴³⁷ Zvika Krieger, "New York U. Plans to Open a Comprehensive Liberal-Arts Campus in Abu Dhabi," *The Chronicle of Higher Education* Vol. 54, Iss. 9 (Oct 26, 2007): 45.

⁴³⁸ Kimberly Koch and Madeleine F. Green, "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States," 11 (Table 2).

⁴³⁹ Masdar Institute of Science and Technology, <http://www.mist.ac.ae/> (accessed April 1, 2010).

⁴⁴⁰ American University of Sharjah, <http://www.aus.edu/about/> (accessed March 17, 2010).

AUS is also expected to be thoroughly grounded in Arab culture and to be part of a larger process of the revitalization of intellectual life in the Middle East. AUS is emerging as a leading comprehensive coeducational university in the Gulf, serving students from the region and around the world. AUS is licensed in the United States by the Department of Education of the State of Delaware. It is accredited by the Commission on Higher Education of the Middle States Association of Colleges and Schools. AUS is also licensed by the UAE Ministry of Higher Education and Scientific Research, and all undergraduate and graduate programs are recognized by the ministry and have been awarded either accreditation or accreditation-eligible status. AUS offers twenty-one bachelor's degrees, forty-one minors and thirteen master's degrees programs. All six of the bachelor degree programs in the AUS College of Engineering are accredited by ABET of the United States. While Arabic is the official language of the United Arab Emirates, the language of instruction at AUS is English. All classes and administrative functions are conducted in English.⁴⁴¹

Sharjah's well-established operation, prestigious campus, and solid reputation have attracted some 5,000 students from more than eighty countries. Professors have been retained by being offered long-term work contracts, and live in free campus housing, with up to \$82,400 of earnings free from American income tax. There is no local income tax.⁴⁴² Due to the success of AUS, Sharjah is now home to some ten indigenous colleges and universities, including a medical school developed in consultation with Monash University in Australia and a College of Fine Arts developed in cooperation with the Royal Academy in London. The opening of small branch campuses in the Gulf by American universities represents a very significant development, but it is possible that an indigenous model promises more pervasive and enduring consequences.⁴⁴³

⁴⁴¹ American University of Sharjah, <http://www.aus.edu/about/> (accessed March 17, 2010).

⁴⁴² Jason DeParle, "Border Crossing, Rising Breed of Migrant: Skilled and Welcome," *New York Times*, August 20, 2007, <http://www.nytimes.com/2007/08/20/world/middleeast/20migrate.html?fta=y> (accessed March 14, 2010).

⁴⁴³ Roderick French, "Changing Education in the Persian Gulf," *The Chronicle of Higher Education* Vol. 54 Iss. 32 (April 18, 2008): 55.

L. THE FAILURE OF GEORGE MASON UNIVERSITY

George Mason University, a public university in Fairfax, Va., arrived in the Gulf in 2005 when it established a small language program intended to help students achieve college-level English skills and meet the university's admission standards for the degree programs that began in 2006 in the emirate of Ras al Khaymah. Sheik Saud bin Saqr al-Qasimi, crown prince and ruler of Ras al Khaymah wanted to make George Mason the centerpiece of the emirate's new education hub. He guaranteed full financial backing for the venture, to cover all operational and capital costs, as well as faculty salaries. His government even promised to pay for the \$300,000 annual administrative and marketing costs the Ras al Khaymah operation incurs in Virginia. George Mason expected to have 200 undergraduates in 2006, and grow from there. But it enrolled nowhere near that many, enrolling only fifty-seven degree students—three in biology, twenty-seven in business and twenty-seven in engineering—at the start of the 2008 academic year. In 2009, only about 180 students enrolled at the campus, far fewer than the 2,000 students its planners hoped would enroll by 2011.⁴⁴⁴ George Mason's local partner Edrak, a private educational company, had provided George Mason with between \$7 million and \$8 million to operate a campus for some 180 students. But for 2009-10, Edrak was only prepared to provide about \$6.5 million, yet it expected George Mason to enroll 300 students.⁴⁴⁵ The Ras al Khaymah students included among others Bangladeshis, Palestinians, Egyptians, Indians, Iraqis, Lebanese, Syrians and most were from families that could afford the \$5,400-a-semester tuition. But George Mason attracted few citizens from the UAE.⁴⁴⁶ The campus also had great difficulty finding students who satisfied its minimum score of 570 on the Toefl, the standard test of English as a foreign language. In February 2009, George Mason University became the first American educational venture in the region to collapse. The failure of George Mason University is a good illustration that short-term for-profit academic ventures are not always economically sustainable in harsh times.⁴⁴⁷

⁴⁴⁴ Mills, "Failure of George Mason U.'s Persian Gulf Campus Sparks Concern," 26.

⁴⁴⁵ Ibid.

⁴⁴⁶ Levin, "U.S. Universities Rush to Set Up Outposts Abroad" 1.

⁴⁴⁷ Romani, "The Politics of Higher Education in the Middle East: Problems and Prospects," 4.

VIII. CONCLUSION

Qatar and the United Arab Emirates are providing institutions with significant financial incentives, tax-free zones and physical infrastructure to encourage and support foreign providers. Especially in Qatar and in Abu Dhabi, foreign schools face minimal financial risk due to the strong monetary support and generous credit terms offered by local authorities. The primary challenge is recruiting qualified faculty and staff to maintain quality standards but competitive tax-free salaries have attracted world-class academics. Another challenge is recruiting students with sufficient English skills but the growing popularity of English as the new *Lingua Franca* of the global knowledge economy combined with the huge increase of the youth population guarantees future demand. Quality assurance is guaranteed by internationally recognized U.S. accrediting agencies and by national accrediting agencies, which the UAE has established. Qatar and the UAE pay for their own students to study at home or abroad, and innovative programs such as the Academic Bridge Program in Qatar will further strengthen students' English proficiency and study skills.

Real and perceived obstacles to obtaining a U.S. visa and the fear of an unwelcoming environment in the U.S for Arab students are powerful incentives for some students to pursue a U.S. education at home. American institutions will also attract students from around the region, especially from Pakistan and India where English is the official language of government and business in both states. Both countries send thousands of students abroad each year and regional American institutions can provide a cheaper alternative and also allow more females to travel abroad who are restricted by cultural norms. Pakistani students have also encountered increased vigilance from American authorities further impeding study abroad in the United States. India's cabinet recently approved a proposal to allow foreign universities to set up branch campuses there.⁴⁴⁸

⁴⁴⁸ Arlene Chang, "India Moves Ahead With Foreign School Plan," *Wall Street Journal*, March 16, 2010.

The popularity of the American foreign branch campus is rapidly increasing worldwide. Cross-border instruction enables students in the receiving country to avoid the high financial and personal costs of moving abroad to study. Obtaining all or part of a U.S. or other foreign degree in one's home country may lower tuition costs, avoids the considerable expenses of traveling to and living in a more expensive country, and eliminates the need to leave friends, family and a familiar environment. Especially in Qatar, which has not allowed women easy access to study abroad programs, the establishment of western branch campuses is the most effective method to expose females to western curriculum and culture.

Qatar and the UAE provide the stability needed to evolve future education hubs. The leadership regimes of both countries are unencumbered by legislative mechanisms to limit spending and can improve their education systems in a very short time. The war in Iraq has destroyed most remnants of academic life there. Lebanon's civil war has fractured its universities along sectarian lines and threatened learning. Egypt's exploding population has overwhelmed its academies and the increasingly authoritarian government has also clamped down on free speech and academic autonomy. These environments have led to a massive exodus of intellectual capital.⁴⁴⁹ Qatar and the UAE are not democracies, but civil liberties are guaranteed and American institutions are allowed to operate independently with no interference. These countries are also very safe, with very low levels of crime, which make both extremely attractive for living arrangements and raising families. There is however, an implicit understanding not to criticize the ruling monarchies. Foreign educational institutions in general are allowed to operate abroad if they provide quality education programs and contribute to a nation's human resource development. Regime change is not an immediate goal of a foreign branch campus.

Today, current U.S. foreign policy in the region is not viewed favorably by local populations but American education, American openness and American ideals are all still very powerful and still very welcome.⁴⁵⁰ Recent opinion polls throughout the Middle East show growing discontent with American foreign policy, primarily based on U.S.

⁴⁴⁹ Krieger, "Ballad of the Old Cafés: War, Chaos and Repression Are Driving the Decline of the Once Great Arab Centers of Learning," 1.

⁴⁵⁰ Brancaccio, "Education City," 1.

policies in Iraq and Palestine, but American education receives a favorable rating.⁴⁵¹ Globalization and international trade is also seen in a positive light throughout the Middle East.⁴⁵² The presence of American branch campuses in Qatar and the UAE will encourage improvements in local institutions. Both countries are revamping all levels of education and have long encouraged private education as options for their populations. Both countries have embraced internationalization as a means to diversify their economies in the new global knowledge economy. American universities in the Middle East are important agents for social and developmental change and help deepen understanding between East and West.

It is incumbent upon all countries in the GCC to minimize their state employment of nationals in order to develop productive economies. State employment has led to bloated bureaucracies and encouraged citizens not to pursue technical degrees. Only 22.6 percent of MENA students pursue science, technical and engineering degrees, much less than in other fast growing developing countries.⁴⁵³ American institutions can provide effective training to improve human resource development, but states must alter their policies to reduce government employment. As the economies of Qatar and the UAE have exponentially increased, the importation of foreign labor has been critical to building their modern infrastructures. The native populations in both countries amount to only twenty percent of their actual populations and employment opportunities will abound. With the new global economy and internationalization requiring a higher skill set from workers to compete, the establishment of American foreign branch campuses is the best guarantee that Qatari and Emirati students will receive the best higher education possible and meet the demands of this new global economy. The universities will also

⁴⁵¹ Zogby International, “Five Nation Survey of the Middle East,” December 2006, 4 <http://www.zogbyinternational.com> (accessed April 14, 2010).

⁴⁵² World Public Opinion, “Muslims Positive About Globalization, Trade,” August 27, 2008, 1 <http://www.worldpublicopinion.org/pipa/articles/btglobalizationtradera/528.php?lb=brme&pnt=528&nid=&id=>

⁴⁵³ Ezzine, “Education in the Arab World: Shift to Quality in Math, Science, Technology Faltering,” 2.

provide the bedrock for the evolution of research centers and lead to the growth of new technologies and industries that will help diversify these states away from gas and petroleum exports.

Qatar and the UAE have evolved different models for the incorporation of American branch campuses in their education systems. Qatar's Education City enrolls fewer than 1,000 students, in large part because the Emir's goal is to train its own citizens by offering a limited number of higher-education programs.⁴⁵⁴ The UAE, too, is focused on its own citizens, but also strives to provide institutions targeting expatriates on a for-profit basis as witnessed in Dubai Knowledge Village. The recent global downturn will put pressure on the for-profit model, but the success of branch campuses will depend in the end on the financial support from the national governments of Qatar and the UAE. The liquidity of these countries and their gas and petroleum reserves guarantee this support and the dedication of the current leadership to improve their citizens' educational attainments also ensures the stability of long-term relationships. Whether these universities can obtain financial self-sufficiency in the future is debatable. Foreign branch campuses provide the best and quickest solution to improving and expanding human capital development in Qatar and the UAE and will help diversify local economies and prepare them for the day when gas and petroleum resources have been exhausted.

⁴⁵⁴ Krieger, "Desert Bloom," 26.

LIST OF REFERENCES

Abu Dhabi Council for Economic Development. *The Abu Dhabi Economic Vision 2030*. Abu Dhabi, UAE: ADCED, 2008.

Altbach, Philip. "The Internationalization of Higher Education: Motivations and Realities." *The NEA Almanac of Higher Education* (2006): 1–4.

_____. "Higher Education Crosses Borders." *Change* 36 (2) (Mar/Apr 2004).

_____. "The Imperial Tongue: English as the Dominating Academic Language." *International Educator* 17 (5) (Sep/Oct 2008).

_____. *American Higher Education in the Twenty-First Century: Social, Political, and Economic Challenges*. Baltimore, Md.: Johns Hopkins University Press, 2005.

Al-Misnad, Sheikha Mozah Bint Nasr. "HH Sheikha Mozah Bint Nasr al-Misnad." Speech prepared by HH Sheikha Mozah Bint Nasr al-Misnad of Qatar for the Brookings Institute, New York, September 29, 2004.
<http://www.brookings.edu/fp/saban/events/sheikhmozah20040929.pdf> (accessed January 18, 2010).

American Civil Liberties Union. "Racial Profiling: Old and New." March 1, 2008.
www.aclu.org/racialjustice/racialprofiling/index.html (accessed February 25, 2010).

Aswad, Jacques et al. *Arab Human Development Report 2003: Building a Knowledge Society*. New York: United Nations Development Program, 2003.

Augustine, Catherine. "Aligning Post-Secondary Educational Choices to Societal Needs: A New Scholarship System for Qatar," *RAND-Qatar Policy Institute* (2008).

Ayubi, Nazih. "The Egyptian Brain Drain: A Multidimensional Problem." *International Journal of Middle East Studies* 15 (4) (November, 1983): 429–433.

Bahgat, Gawdat. "Education in the Gulf Monarchies: Retrospect and Prospect." *International Review of Education* 45(2) (1999): 127–138.

Barrow, C. "Globalization, Trade Liberalization, and the Trans-nationalization of Higher Education." Paper presented at Boston College, Chestnut Hill, Mass, November 18, 2008.

Benard, Cheryl. "Fixing What's Wrong - and Building on What's Right - With Middle East Education." *SAIS Review* 26 (2) (Summer-Fall 2006).

Bollag, Burton. "Scholars Kept Out." *The Chronicle of Higher Education* 53 (41) (Jun 15, 2007).

Brancaccio, David. "Education City." *NOW*. Video transcript from week of May 16, 2008. <http://www.pbs.org/now/shows/420/index.html> (accessed November 6, 2009).

Brubacher, J. S. and W. Rudy. *Higher Education in Transition*. New York: Harper and Row, 1976.

Calderwood, James. "Dubai Serves as Diversification Model." *Associated Press*, February 4, 2007.

Carrington, William and Enrica Detragiache. "How Extensive is the Brain Drain?" *Finance & Development* 36 (June, 1999): 47–48.

Chang, Arlene. "India Moves Ahead With Foreign School Plan." *Wall Street Journal*, March 16, 2010.

Coffman, James. "Higher Education in the Gulf: Privatization and Americanization." *International Higher Education* (Fall 2003).

Cowley, W.H. *International and Historical Roots of American Higher Education*. New York: Garland Publishing, 1991.

Crystal, Jill. *Oil and Politics in the Gulf: Rulers and Merchants in Kuwait and Qatar*. New York: Cambridge University Press, 1995.

Curtis, Polly. "Fall in US Overseas Student Market." *Guardian Unlimited London*, November 4, 2003.

Das, Sushi. "Foreign Students at Capacity Level; Era of Growth Over, Era of Consolidation to Begin." *The Age*, July 26, 2008.

Davidson, Christopher. "Higher Education in the Gulf: a Historical Background." In *Higher Education in the Gulf States: Shaping Economies, Politics and Culture*, edited by Christopher Davidson. London: London Middle East Institute, 2008.

Del Castillo, Daniel. "The Arab World's Scientific Desert." *The Chronicle of Higher Education* (March 5, 2005): 1–6.

DeParle, Jason. "Border Crossing, Rising Breed of Migrant: Skilled and Welcome." *New York Times*, August 20, 2007.

Economist Intelligence Unit. *Country Profile: Qatar*. London, UK: The Economist, 2004.

Efimenco, N. Marbury. "American Impact Upon Middle East Leadership." *Political Science Quarterly* 69(2) (June, 1954): 198–202.

El-Sanabary, Nagal. *Education in the Arab Gulf States and the Arab World: An Annotated Bibliographic Guide*. New York: Garland Publishing, 1992.

Ezzine, Mourad. "Education in the Arab World: Shift to Quality in Math, Science, Technology Faltering." *World Bank Fast Briefs* no.20 (February, 2009). <http://go.worldbank.org/OXADZV71I0> (accessed August 22, 2009).

Fasano, Ugo and Zubair Iqbal. "GCC Countries: From Oil Dependence to Diversification." *International Monetary Fund* (2003). <http://www.imf.org> (accessed January 15, 2010).

Findlow, Sally. "Higher Education and Linguistic Dualism in the Arab Gulf." *British Journal of Sociology of Education* 27 (1) (February 2006).

Fischer, Karin. "How the Deal Was Done: Michigan State in Dubai." *The Chronicle of Higher Education* 55 (6) (March 28, 2008).

Forest, J. and P.G.Altbach. "Globalization and the University: Realities in an Unequal World." *International Handbook of Higher Education* 1 (2006): 123–125.

Freeman, E. "The American University in Cairo: An Experiment in Cross-cultural Development." *The Journal of Higher Education* 34(3) (March, 1963).

French, Roderick. "Changing Education in the Persian Gulf." *The Chronicle of Higher Education* 54 (32) (April 18, 2008): 55–59.

Galal, Ahmed et al. *The Road Not Traveled: Education Reform in the Middle East and North Africa*. Washington, D.C.: The World Bank, 2008.

Garrett, Larry N. and Ali Farghaly. "On the Need for an Integrated Policy Infrastructure for the Delivery of Technical and Vocational Education in the Arab Gulf Region." *Comparative Education* 23(3) (1987): 317–321.

Ghabra, Shafeeq and Margreet Arnold. "Studying the American Way: An Assessment of American-Style Higher Education in Arab Countries." *Washington Institute for Near East Policy Focus* #71 (June 2007): 6.

Global Higher Education. "Education Cities, Knowledge Villages, Schoolhouses, Education Hubs, and Hotspots: Emerging Metaphors for Global Higher Ed." The Global Higher Ed Blog, April 16, 2008. <http://globalhighered.wordpress.com> (accessed December 3, 2009).

Gonzalez, Gabriella ed. *Facing Human Capital Challenges of the 21st Century : Education and Labor Market Initiatives in Lebanon, Oman, Qatar, and the United Arab Emirates*. Qatar: Rand-Qatar Policy Institute, 2008.

Guruz, Kemal. *Higher Education and International Student Mobility in the Global Economy*. New York: SUNY Press Albany, 2008.

Hausmann, Ricardo et al. *The Global Gender Gap Report 2009*. Geneva, Switzerland: World Economic Forum, 2009.

Hira, Anil. "The Brave New World of International Education." *The World Economy* 26 (6) (2003).

Institute of International Finance, Inc. "Summary Appraisal, Gulf Cooperation Council Countries." August 15, 2006.

Kerr, Clark. "The American Mixture of Higher Education in Perspective: Four Dimensions." *Higher Education* 19 (1) (1990).

Kettani, M. Ali. "Engineering Education in the Arab World." *Middle East Journal*, 28(4) (Autumn, 1974): 440–451.

Kritz, Mary M. "Globalization and Internationalization of Tertiary Education." Report submitted to the United Nations Population Division, Cornell University, Ithaca, New York, August 21, 2006.

Koch, Kimberly and Madeleine F. Green. "Sizing up the Competition: The Future of International Postsecondary Student Enrollment in the United States." *American Council on Education* (September 2009).

Koh Chin, Hey-Kyung ed. *Open Doors 2005: International Educational Exchange*. New York: Institute of International Education, 2005.

Krieger, Zvika. "Ballad of the Old Cafés: War, Chaos and Repression are Driving the Decline of the Once Great Arab Centers of Learning," *Newsweek*, August 25, 2008.

_____. "Desert Bloom." *The Chronicle of Higher Education* 54 (29) (2008).

_____. "Dubai, Aiming to Be an Academic Hub, Strikes a Deal With Michigan State." *The Chronicle of Higher Education* 54 (8) (Oct 19, 2007): 33-34.

_____. "New York U. Plans to Open a Comprehensive Liberal-Arts Campus in Abu Dhabi." *The Chronicle of Higher Education* 54 (9) (Oct 26, 2007): 45-46.

_____. "Buying Culture; By Luring Western Institutions Like the Louvre and Yale, Abu Dhabi Aims to Become a Global Arts Center." *Newsweek*, Aug 6, 2007, 48.

Lafaye, J. "Literature and Cultural Life in Colonial Spanish America." In *Cambridge History of Latin America: Vol. 2 Colonial Latin America*, edited by L. Bethell. Cambridge, England: Cambridge University Press, 1984.

Landau, Jacob M. "Arab and Turkish Universities: Some Characteristics." *Middle Eastern Studies* 33(1) (January, 1997): 6-9.

Leete, Richard et al. *Qatar National Vision 2030*. Doha, Qatar: General Secretariat for Development Planning, 2009.

Lefrere, Paul. "Competing Higher Education Futures in a Globalizing World." *European Journal of Education* 42 (2007).

Levin, Tamar. "U.S. Universities Rush to Set Up Outposts Abroad." *New York Times*, February 10, 2008.

_____. "Global Classrooms: Destination Qatar." *New York Times*, February 11, 2008.

Marginson, Simon. "Globalization and Higher Education." Paper No. 8 presented at the Organization for Economic Cooperation and Development Conference, Brussels, Belgium, July 6, 2007.

Martorell, Francisco. "A Survey of Recent Qatari Secondary School Graduates." *RAND-Qatar Policy Institute* (2007).

McMahon, Mary E. "Higher Education in a World Market: An Historical Look at the Global Context of International Study." *Higher Education* 24 (4) (December, 1992).

Miller, Dith. "American University in Beirut: Walking a Precarious Line," *Science* 188 (June 20, 1975): 1192.

Mills, Andrew. "Failure of George Mason U.'s Persian Gulf Campus Sparks Concern." *The Chronicle of Higher Education* 55, (27) (March 13, 2009).

_____. "Academics in the Persian Gulf." *The Chronicle of Higher Education* 55 (24) (Feb 20, 2009): 7–9.

Motivans, Albert et al. *Global Education Digest 2009*. Montreal, Canada: The UNESCO Institute for Statistics, 2009. <http://www.uis.unesco.org> (accessed January 15, 2009).

Myusken, Joan and Samia Nour. "Deficiencies in Education and Poor Prospects for Economic Growth in the Gulf Countries: The Case of the UAE." *Journal of Development Studies* 42 (6) (August 2006): 965–970.

Naidoo, Rajani. "Higher Education as a Global Commodity: The Perils and Promises for Developing Countries." *OBHE* (February, 2007). <http://www.obhe.ac.uk> (accessed April 3, 2010).

NAFSA, "The Economic Benefits of International Education to the United States for the 2007-2008 Academic Year: A Statistical Analysis." *Association of International Educators* (2008) http://www.nafsa.org/_File/_eis08/Guam.pdf (accessed March 29, 2009).

Nelson, Caren. "UAE National Women at Work in the Private Sector, Conditions and Constraints." Center for Labor Market Research and Information, United Arab Emirates Ministry of Information and Culture, Dubai .2005. <http://www.zu.ac.ae/infoasis/modules/mod8/Business/documents/UAEnationalwomenatworkintheprivatesector.pdf> (accessed November 15, 2009).

OECD. *Internationalization and Trade in Higher Education: Opportunities and Challenges*. Paris: United Nations, 2004.

"Over 86 percent Qataris Favour Govt. Jobs: Study," *The Peninsula*, February 20, 2003.

OxResearch. "Shift to Quality in Education Faltering." May 20, 2008.

Psacharopoulos, George. "Education as an Investment." *Finance & Development* (September 1982).

Qatar Statistics Authority. "Analytical Summary of the Labour Force Sample Survey Results." October, 2007. <http://www.qsa.gov.qa> (accessed November 22, 2009).

Ramazani, Nesta. "Arab Women in the Gulf." *Middle East Journal* 39 (2) (Spring, 1985), 272-275.

Romani, Vincent. "The Politics of Higher Education in the Middle East: Problems and Prospects." Brandeis University Crown Center for Middle East Studies Brief no.36 (May 1, 2009). <http://www.brandeis.edu/crown> (accessed January 12, 2010).

Roucek, Joseph S.“Education in the Middle East.” *The Phi Delta Kappan* 37(9) (June, 1956): 440–444.

Rugh, William A. “Arab Education: Tradition, Growth and Reform.” *Middle East Journal* 56 (3) (Summer, 2002): 397–402.

Salmi, Jamil ed. *Constructing Knowledge Societies: New Challenges for Tertiary Education*. New York: The International Bank for Reconstruction and Development, 2002.

Santora, Marc. “N.Y.U. Names the Leader of Its Abu Dhabi Campus.” *New York Times*, September 30, 2008.

Sasson, Albert. “Research and Development in the Arab States: the Impact of Globalization, Facts and Perspectives.” Paper presented at the UNESCO Regional Seminar “The Impact of Globalization on Higher Education and Research in the Arab States” Rabat, Morocco, May 24-25, 2007.

Scott, John C. “The Mission of the University: Medieval to Postmodern Transformations.” *The Journal of Higher Education* 77(1) (2006): 6–9.

Siddiqi, Moin. “Qatar Stands Firm in the Face of Global Financial Crisis.” *The Middle East* (July 2009).

Spreng, Connor P. *Policy Options for Interventions in Failing Schools*, Santa Monica, Ca.: RAND, 2005.

Stasz, Cathleen. *Postsecondary Education in Qatar: Employer Demand, Student Choice, and Options for Policy*. Qatar: RAND-Qatar Policy Institute, 2007.

Stern, Scott, Michael E. Porter, and Jeffrey L. Furman.“The Determinants of National Innovative Capacity.” *National Bureau of Economic Research Working Paper* 7876 (2000): 25–30.

“Survey: The Brains Business” *The Economist*, September 10, 2005.

Suyyagh, Fayiz ed. *Arab Knowledge Report 2009: Towards Productive Intercommunication for Knowledge*. Dubai: United Nations Development Program, 2010.

Tabutin, Dominique. “The Demography of the Arab World and the Middle East from the 1950s to the 2000s: A Survey of Changes and a Statistical Assessment.” *Population* 60 no. 5/6 (Sep. – Dec., 2005).

Taheri, Amir. "Women in Kuwait." *Town Hall*, 16 July 2003.
<http://www.townhall.com/columnists/GuestColumns/Taheri20030716.shtml>.

UNESCO. *Higher Education in Developing Countries: Peril and Promise*. New York: UNESCO, 2000.

_____. *Higher Education in the Arab States*. Beirut: UNESCO, 2002.

_____. *UIS Statistics in Brief: Qatar 2009*. New York: UNESCO, 2009.

U.S. Bureau of the Census, *World Population Profile: 1998*. Washington, DC.: USBC, 1999. <http://www.census.gov/ipc/www/idb/worldpopinfo.html> (accessed April 21, 2009).

_____. *World Population Profile: 2008*. Washington, DC.: USBC, 2008.
<http://www.census.gov/ipc/www/idb/worldpopinfo.html> (accessed April 21, 2009).

Van Damme, Dirk. "Quality Issues in the Internationalization of Higher Education." *Higher Education* 41 (4) (June, 2001).

Vincent-Lancrin, S. "Building Capacity through Cross-border Tertiary Education." Paper presented to the UNESCO/OECD Australia Forum on Trade in Educational Services, Sydney, Australia, October 11-12, 2004.
<http://www.oecd.org/dataoecd/43/25/33784331.pdf> (accessed November 3, 2009).

Vine , Paula ed. *United Arab Emirates Yearbook 2009*. London: Trident Press, 2009.

Wellman, Jane V. "Apples and Oranges in the Flat World: A Layperson's Guide to International Comparisons of Postsecondary Education." *American Council on Education Center for Policy Analysis* (2007). <http://www.acenet.edu> (accessed December 15, 2009).

World Bank. "Knowledge Assessment Methodology 2008."
<http://www.worldbank.org/wbi/kamon> (accessed 25 February 2010).

Zahlan, A.B. "The Arab Brain Drain, Innovation and Development." Paper presented to the UNESCO Conference on Arab Brain Drain, Amman, Jordan, November 27 – December 1, 2004.

Zahlan, Rosemarie Said. *The Making of the Modern Gulf States: Kuwait, Bahrain, Qatar, the United Arab Emirates and Oman*. Reading, UK: Ithaca Press, 1998.

_____. *The Origins of the United Arab Emirates*. New York: St Martin's Press, 1978.

Zehr, Mary Ann. "Consultants Help Transform Arab Schools; Persian Gulf States Enlist Foreign Education Experts in Cautious Move Toward Western Methods." *Education Week* 27 (29) (March 26, 2008).

Zoepf, Katherine. "Universities for Women Push Borders in Persian Gulf." *The Chronicle of Higher Education* 52 (32) (Apr 14, 2006).

Zogby International. "Five Nation Survey of the Middle East." December 2006.
<http://www.zogbyinternational.com> (accessed April 14, 2010).

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